

P  
Med.  
B.

Biological  
& Medical  
Serials

# STORAGE

## REPORT

OF THE

# BARNES HOSPITAL SAINT LOUIS

FOR

1920



## FORM OF BEQUEST

*I give and bequeath unto the Trustees of Barnes Hospital (now located at Kingshighway and Euclid Avenue, St. Louis, Missouri), and to their successors in trust, the sum of \_\_\_\_\_ Dollars as a permanent endowment fund,\* the income of which shall be used by said Trustees for the support and maintenance of said Hospital.*

*(See note below.)*

---

NOTE.—If real estate is given, use the words, "I give, devise and bequeath," etc. If it is desired to make a gift for a special purpose, describe the purpose fully in place of the words, "as a permanent endowment, etc."

\* See pp. 18, 19 and 20.

**REPORT**

OF THE

**BARNES HOSPITAL  
SAINT LOUIS**

FOR

**1920**

SAINT LOUIS  
H. S. COLLINS PRESS  
1922



## Contents

	PAGE
TRUSTEES' REPORT . . . . .	5
FINANCIAL REPORT . . . . .	10
DONATIONS RECEIVED . . . . .	16
ENDOWMENTS AND CONTRIBUTIONS . . . . .	18
REPORT OF THE SUPERINTENDENT . . . . .	21
NATIONALITY OF PATIENTS . . . . .	24
RELIGION OF PATIENTS . . . . .	25
SUMMARY OF WORK DONE . . . . .	26
MEDICAL SERVICE . . . . .	27
DENTAL REPORT . . . . .	30
ANNUAL REPORT OF THE BIOLOGICAL LABORATORY . . . . .	31
METABOLISM UNIT . . . . .	35
HYDRO- AND PHYSICAL-THERAPEUTIC DEPARTMENT . . . . .	37
ASSOCIATED DISEASES . . . . .	39
DISCREPANCIES BETWEEN THE CLINICAL AND ANATOMICAL DIAGNOSIS . . . . .	43
SURGICAL SERVICE . . . . .	48
OBSTETRICAL AND GYNECOLOGICAL SERVICE . . . . .	54
REPORT OF THE DEPARTMENT OF PATHOLOGY . . . . .	61
REPORT OF THE X-RAY DEPARTMENT OF THE WASHINGTON UNIVERSITY SCHOOL OF MEDICINE . . . . .	64
REPORT OF THE WASHINGTON UNIVERSITY TRAINING SCHOOL FOR NURSES . . . . .	66
THE WASHINGTON UNIVERSITY DISPENSARY . . . . .	69
SOCIAL SERVICE . . . . .	72
LIBRARY REPORT . . . . .	76
TRUSTEES . . . . .	79
HOSPITAL STAFF . . . . .	80
REGISTER OF PRESENT MEMBERS OF THE STAFF . . . . .	83
REGISTER OF FORMER MEMBERS OF THE STAFF . . . . .	92
COMMITTEES . . . . .	99



## Trustees' Report

Since the opening of Barnes Hospital, in December, 1914, hospital operation has been confronted with many difficult problems. The chief of these were: the gigantic changes necessary for adjustment to a war basis and then the readjustment to a peace basis; the high cost of labor, material, drugs, food; in fact, everything which entered into hospital operation. Notwithstanding these difficulties, the Trustees have at all times maintained the Hospital at the highest standard.

Probably the most difficult problem of the year 1920 was the shortage of nurses, the reasons for which are given in the report of the Superintendent of Nurses, elsewhere in this volume. In order not to decrease the number of patients nor overwork the nurses on account of the shortage, the Trustees decided to employ as many nurses and attendants as were necessary to properly care for 165 patients. This action necessarily required an expenditure of a considerable sum of money which had not been expected.

The deficit from hospital operation for the year was \$81,578.25 and the average cost per capita per day was \$5.49. Since the ward rate is \$3.25 per day and the average cost per day is \$5.49 it can readily be seen that the Hospital loses money on every ward patient, and especially so since a large percentage of the ward patients are treated absolutely free or pay only a part of the ward rates. The fact that 77½ per cent of the total number of patients were ward patients explains the large deficit from hospital operation.

The Hospital has every equipment and facility for rendering a larger service of this kind. During the year we were compelled to refuse to worthy patients the care we were anxious to give them, not because of lack of room, but because of lack of funds to care for them. If money were available the material facilities which the Hospital now has lying idle could be utilized to the full and most advantageously, because so little of it would have to be spent for equipment and administration.

The greatest need of the Hospital is therefore an increased endowment fund and annual contributions which will enable it

## BARNES HOSPITAL

to open its unused ward and use its facilities to the full. The Hospital receives no aid from the City or State, but is dependent upon the generosity of the people.

The endowment of Daniel and Elizabeth J. Kuhn, amounting to \$10,000.00, became available to the Hospital upon the death of Dr. Kuhn on January 13, 1920. We wish to express our appreciation of the foresight, humanity and generosity of the donor in making this endowment.

At their sessions of 1920, each of the three Annual Conferences of the M. E. Church, South, in Missouri, at the solicitation of a committee appointed by the College of Bishops, and consisting of Bishops W. B. Murrah, E. R. Hendrix and W. F. McMurry, assumed assessments for a fixed sum to be applied towards paying the salary of a Chaplain to Barnes Hospital. By this action the hospital is relieved of any expense incident to a Chaplain. We wish to express to the College of Bishops, the Committee and each of the Missouri Conferences our sincere appreciation of their interest and good will towards the Hospital.

During the year prolonged litigation over real estate in Tulsa, belonging to the Hospital, was brought to a successful close.

We wish to call attention to the reports of Drs. Dock and Graham, particularly the part referring to the autopsies. The thoroughness of the work of a hospital is judged to a very considerable extent by the percentage of its autopsies, as in this way only can the accuracy of diagnosis and treatment be established. It is most unfortunate that personal feelings are too often allowed to interfere with a procedure which cannot harm the dead, which may disclose facts of great value to the living relatives and to the community, and which contributes greatly to the progress of medicine in general.

The Trustees are appreciative of the work of the Occupational Therapy Department, which is operated by the Junior League. The workshop of this department is located in a large, light and well ventilated room in the basement under the surgical ward. Here ambulatory patients are kept busy in many ways. They earn a small recompense and are better fitted for a normal life after illness or following a period of disability. The Trustees are also appreciative of the contribution of workers and material from the Missouri Association for Occupational Therapy, who

## TRUSTEES' REPORT

have worked with patients confined to bed. Their efforts have contributed greatly to the morale and therapy of the patients.

The Social Service Department of the Hospital is now generally recognized as one of the most important departments, and during the last few years has probably advanced as much as, or more than, any other. We feel very grateful to the ladies who have this work in charge.

During the year the Hospital has had many distinguished visitors, among them two delegations sent by the Rockefeller Foundation, one from England and the other from Belgium.

The Trustees wish to thank the Staff and all the personnel of the Hospital for the services they have rendered during the year. They also wish to thank all those who have in any way, by contribution of time, money or gifts, aided in the work.

L. RAY CARTER,  
FRANK C. RAND,  
PAUL BROWN,

*Trustees of Barnes Hospital.*



## In Memoriam

---

### Minutes on the Death of Doctor Albert F. Koetter

---

In the death of Doctor Albert F. Koetter the Staff of Barnes Hospital has suffered a serious loss. Doctor Koetter's knowledge and skill in his special field were conspicuous, and he was always prompt and thorough in his examination and treatment of those brought to his attention. His gentleness and patience in the performance of his work were as noteworthy as his skill, and his quiet and serious but cheerful manner added to his value as a consultant. Of his fortitude under the painful and finally fatal affection he suffered no description can be adequate. Though present while the war was in progress, it did not at all lessen the amount of time Doctor Koetter devoted to his routine work, as well as his special examinations and to many other duties brought on by the war. His life was an example and an inspiration to his colleagues and to all who came within his activity.

The Hospital Committee, by action taken March 2, 1920, orders this minute to be entered on the official record, and that a copy be sent to the family of Doctor Koetter.

# Financial Report

## COMPARATIVE BALANCE SHEET AS AT DECEMBER 31, 1920 AND 1919

	ASSETS	December 31, 1920	December 31, 1919	Increase—Decrease
<b>HOSPITAL PROPERTY AND EQUIPMENT:</b>				
Land . . . . .	\$ 168,000.00	\$ 168,000.00		
Hospital and Other Buildings. . . . .	956,480.79	956,480.79		
Furniture and Fixtures . . . . .	57,030.61	57,030.61		
	<hr/> <hr/> <hr/>	<hr/> <hr/> <hr/>	<hr/> <hr/> <hr/>	<hr/> <hr/> <hr/>
	<b>\$1,181,511.40</b>	<b>\$1,181,511.40</b>		
<b>INVESTMENTS:</b>				
Real Estate . . . . .	\$ 404,374.00	\$ 422,963.89		
Stocks and Bonds. . . . .	573,609.52	551,009.52		
Real Estate Notes . . . . .	4,651.00	11,550.00		
	<hr/> <hr/> <hr/>	<hr/> <hr/> <hr/>	<hr/> <hr/> <hr/>	<hr/> <hr/> <hr/>
	<b>982,634.52</b>	<b>985,523.41</b>		
<b>CURRENT AND WORKING ASSETS:</b>				
Cash in Banks and on Hand . . . . .	\$ 651.50	\$ 6,409.94		
Accounts Receivable, less Reserves.	20,484.27	60,948.56		
Inventory of Drugs and Supplies . . . . .	16,093.70	15,059.42		
	<hr/> <hr/> <hr/>	<hr/> <hr/> <hr/>	<hr/> <hr/> <hr/>	<hr/> <hr/> <hr/>
	<b>37,229.47</b>	<b>82,417.92</b>		
	<b><hr/><hr/><hr/></b>	<b><hr/><hr/><hr/></b>	<b><hr/><hr/><hr/></b>	<b><hr/><hr/><hr/></b>
	<b>\$2,201,375.39</b>	<b>\$2,249,452.73</b>		
	<b><hr/><hr/><hr/></b>	<b><hr/><hr/><hr/></b>	<b><hr/><hr/><hr/></b>	<b><hr/><hr/><hr/></b>
				<b>\$48,077.34</b>

FINANCIAL REPORT

LIABILITIES

CURRENT LIABILITIES:	
Accounts Payable . . . . .	\$ 883.44
Beneficial Bonds—Unused Balance	2,613.50
	—————
RESERVE FOR RENEWALS AND REPLACEMENTS . . . . .	49,118.35
	—————

BUILDING AND ENDOWMENT FUNDS:

Productive Endowment—	
Barnes . . . . .	\$ 866,205.24
Wyeth Endowment . . . . .	3,000.00
Kuhn Endowment . . . . .	10,000.00
Barnes Endowment of Hospital	
Property and Equipment . . . . .	1,181,511.40
	—————
GENERAL FUND . . . . .	2,060,716.64
	—————
TOTAL . . . . .	\$2,201,375.39

11

We have audited the books and accounts of the Barnes Hospital for the two years ended December 31, 1920, and certify that, in our opinion, the above Balance Sheet correctly sets forth the financial position of the Hospital at December 31, 1919 and 1920.

We have verified, by actual count or by certificates received from the depositaries, the securities representing the investments, and the cash balances, of the Hospital.  
 Federal Reserve Bank Building, St. Louis,  
 September 14, 1921.

MARWICK, MITCHEL & CO.

## BARNES HOSPITAL

**COMPARATIVE INCOME ACCOUNT  
FOR THE YEARS ENDED DECEMBER 31, 1920 AND 1919**

	Year ended December 31,		Per Patient Day 1920
	1920	1919	
<b>TOTAL PATIENT DAYS . . . . .</b>	<b>54,118</b>	<b>53,135</b>	
<b>INCOME:</b>			
Patients' Board . . . . .	\$179,194.27	\$135,660.27	\$2,553
Operating Room . . . . .	19,770.50	17,609.00	.331
Special Nurses' Board . . . . .	10,828.50	7,352.50	.138
Rent Received . . . . .	5,272.92	4,155.43	.078
Ambulance Service . . . . .	57.00	42.00	.001
Laundry . . . . .	200.00	493.15	.009
Anaesthesia Course . . . . .	138.58	123.85	.004
Bank Interest . . . . .	——	\$215,461.77	.002
		\$165,436.20	\$3,981 —————
		——	\$3,112
<b>EXPENDITURES:</b>			
<b>Administrative Expenses—</b>			
Salaries—Executive . . . . .	\$ 16,592.46	\$ 13,489.28	
Printing, Stationery and Postage	2,968.64	2,148.83	——
	——	19,561.10	15,638.11 —————
<b>Professional Care of Patients—</b>			
Medical and Surgical Supplies . . .	\$ 14,910.11	\$ 11,131.70	
Drugs (less Sales) . . . . .	1,981.99	1,727.95	
Nursing . . . . .	94,809.51	75,081.40	
Linen and Bedding . . . . .	7,009.27	2,425.70	
	——	118,710.88	90,366.75 —————
		——	2,193 —————
		——	1,701

## FINANCIAL REPORT

<b>Department Expense—</b>						
Housekeeping . . . . .	\$ 29,880.36					\$ 26,012.57
Kitchen . . . . .	7,067.12					5,446.91
Laundry . . . . .	4,736.94					.....
Sundries . . . . .	.....					731.66
	.....					\$ 32,191.14
<b>Steward's Department—Com-</b>						\$ 0.770
missary . . . . .	38,512.22					.450
	.....					.....
<b>General House and Property</b>						
<b>Expenses—</b>						
Heat, Light and Power . . . . .	\$ 29,949.25					\$ 32,852.40
Gas . . . . .	2,064.62					1,615.56
Grounds and Building . . . . .	14,036.87					13,944.31
Repairs . . . . .	3,140.82					2,288.02
Water . . . . .	1,189.61					1,026.41
Taxes . . . . .	1,694.54					1,308.91
Telephone . . . . .	5,145.23					3,417.15
Sundries . . . . .	2,315.97					527.57
	.....					.....
	59,536.91					56,980.33
	.....					.....
						1.099
						1,072
<b>Sundry Expenses—</b>						
Miscellaneous Furnishing and						
Equipment . . . . .	.....					\$ 6,700.57
Renewals and Replacements . . .	\$ 15,000.00					5,000.00
Bad Debts . . . . .	4,034.49					5,132.89
	.....					.....
	19,034.49					16,833.46
	.....					.....
						.352
<b>Total Expenditures . . .</b>						
	\$297,040.02					\$5,486
	.....					.....
						70,488.69
						.....
<b>NET DEFICIT . . . . .</b>						\$ 1,578.25
						\$1,505
						.....
						1,378

BARNES HOSPITAL

GENERAL FUND, LOSS AND GAIN, 1920

Balance December 31, 1919 . . . . .	\$85,014.76
Donations Received . . . . .	19,007.92
Beneficial Bonds Matured . . . . .	7,612.75
Dividends from Stock Investments . . . . .	45,345.50
Income from Real Estate . . . . .	20,304.35
Interest on Notes Receivable and Bank Balance . . . . .	1,732.81
Dividends from Kuhn Fund . . . . .	520.00
Interest from Kennard Estate . . . . .	500.00
	—————
	\$180,038.09

FROM WHICH DEDUCT:

Excess of Expenses over Receipts from Hospital Operations . . . . .	\$81,578.25
Sundry Expenses . . . . .	412.95
Depreciation Due to Reappraisal of Properties Other than Hospital . . . . .	3,589.89
Adjustments to Accounts Receivable . . . . .	6,413.54
	—————
	\$91,994.63

BALANCE IN GENERAL FUND DECEMBER 31, 1920 . . . . .	\$ 88,043.46
---	--------------

REAL ESTATE OWNED

As at December 31, 1920

CITY BLOCK	LOCATION	LEDGER VALUE DEC. 31, 1920
30	316 N. Second Street . . . . .	\$ 8,750.00
56	316-18 S. Third Street . . . . .	6,500.00
56	215 Spruce Street . . . . .	2,549.00
56	313 S. Second Street . . . . .	3,500.00
64	419-21 N. Second Street . . . . .	15,000.00
65	527 N. Second Street . . . . .	10,000.00
106	Broadway and Spruce Street . . . . .	185,000.00
312	Broadway and Wright Street . . . . .	24,000.00
362	1119-23 Madison Street . . . . .	2,450.00
4501	Newstead and Olive Streets . . . . .	118,500.00
56	320 S. Third Street . . . . .	4,500.00
142	Broadway and Carr Street . . . . .	23,625.00
	—————	
	TOTAL . . . . .	\$404,374.00

## FINANCIAL REPORT

### STOCKS AND BONDS OWNED

As at December 31, 1920

	NO. OF SHARES	LEDGER VALUE DEC. 31, 1920
American Sugar Refinery Company, Preferred . . . . .	142	\$ 16,756.00
Atchison, Topeka & Santa Fe Railroad, Preferred . . . . .	100	10,000.00
Baltimore & Ohio, Preferred . . . . .	230	17,307.50
Boatmen's Bank . . . . .	405	45,765.00
Mercantile Trust Company . . . . .	410	143,090.00
Mississippi Valley Trust Company . . . . .	410	118,080.00
Rice-Stix Dry Goods Company, First Preferred . . . . .	100	11,200.00
First National Bank of St. Louis . . . . .	684	118,523.52
Title Guaranty Trust Company . . . . .	110	11,300.00
Union Pacific, Preferred . . . . .	100	8,437.50
United States Steel, Preferred . . . . .	100	11,950.00
International Shoe Company . . . . .	550	60,275.00
The Dallas Telephone Company—\$1,000 Bond . . . . .	...	925.00
 <b>TOTAL</b> . . . . .		<b>\$573,609.52</b>
<b>REAL ESTATE NOTES:</b>		
Young Mitchell and John O. Mitchell . . . . .		\$ 3,101.00
Lucille C. Alter . . . . .		1,550.00
 <b>TOTAL</b> . . . . .		<b>\$ 4,651.00</b>

### BENEFICIAL BONDS PURCHASED

For the year ended December 31, 1920

December 31, 1919, Balance . . . . .	\$ 7,612.75
Purchases of Beneficial Bonds made in 1920:	
Murray Carleton . . . . .	\$1,000.00
R. H. Stockton . . . . .	50.00
W. L. Wilkinson . . . . .	250.00
Wm. K. Bixby . . . . .	550.00
Cupples & Company . . . . .	500.00
Geo. D. Carpenter . . . . .	100.00
Joseph D. Bascom . . . . .	1,000.00
Graham Paper Company . . . . .	250.00
Sam'l C. Davis . . . . .	500.00
Geo. D. Markham Insurance Co. . . . .	100.00
	—————
	4,300.00
 <b>TOTAL</b> . . . . .	<b>\$11,912.75</b>
Less—Appropriated to Patients' Board during 1920 . . . . .	\$1,686.50
Less—Beneficial Bonds Matured . . . . .	7,612.75
	—————
	9,299.25
 <b>TOTAL</b> . . . . .	<b>\$ 2,613.50</b>

# Donations Received

For the year ended December 31, 1920

## DONATIONS TO FREE BEDS:

Hospital Saturday and Sunday Association . . . . .	\$ 5,414.50
--	-------------

## SPECIAL DONATIONS:

H. G. Brookings (\$2,500.00 less \$62.00 expended to date) . . . . .	\$ 2,438.00
Donations for Eye Patients . . . . .	95.42
Gift of Mrs. Isaac Nathan for Special Purpose . . . . .	300.00
	2,833.42

## DONATIONS TO GENERAL FUND:

Aiken, Thos. R. . . . .	\$ 50.00
Bascom, Chas. E. . . . .	100.00
Brown, Paul. . . . .	2,500.00
Carter, C. L. . . . .	100.00
Carter, T. W. . . . .	100.00
Carter, L. Ray. . . . .	2,500.00
Elder Manufacturing Company . . . . .	50.00
Ewing, A. B. . . . .	50.00
Elliot Frog and Switch Company. . . . .	50.00
Frank, D. A. . . . .	25.00
Fristoe, J. W. . . . .	250.00
Guy, W. E. . . . .	200.00
Goddard, Warren . . . . .	50.00
Hill, Wm. T. . . . .	200.00
Hidden, Edward . . . . .	50.00
Hall, Marshall . . . . .	100.00
Johnston, J. L.. . . . .	50.00
Kennard, J. B.. . . . .	100.00
Kennedy, Samuel . . . . .	100.00
Lamy, C. Oscar . . . . .	50.00
Lang, Ben S. . . . .	100.00
Langenberg, Harry H. . . . .	100.00
Moore, Edw. A. . . . .	25.00
Orthwein, F. C. . . . .	50.00
Peters, H. W. . . . .	500.00
Pulitzer, Jos. . . . .	50.00
Powell, Geo. F. . . . .	50.00
Ratcliff, F. . . . .	100.00
Rand, F. C. . . . .	2,500.00

### DONATIONS RECEIVED

Rand, Helen O. . . . .	\$100.00
Hunter-Robinson Milling Company . . . . .	25.00
Ray, E. Lansing . . . . .	50.00
Sloan, W. M. . . . .	100.00
Steinbreder, H. J. . . . .	100.00
Siegel, A. J. . . . .	50.00
Smith, L. F. . . . .	25.00
Scanlan, Phillip A. . . . .	10.00
Tiffany, Geo. S. . . . .	100.00
Wade, Festus J. . . . .	50.00
	----- \$10,760.00
<b>TOTAL . . . . .</b>	<b>\$19,007.92</b>

# **Endowments and Contributions**

There are many important funds to which money may be left or contributed, in both small and large amounts, for either special or general purposes, among which are:

**ENDOWMENT FUND  
GENERAL DONATION FUND  
THE FREE BED FUND**

## **ENDOWMENTS**

A contribution to the Endowment Fund entitles the donor to the following privileges, according to the amount of the gift:

\$1,000.00 entitles the donor to nominate one patient per year to a bed in the general wards. The contribution will be acknowledged on a tablet in the main corridor of the Hospital.

\$2,500.00 entitles the donor to nominate three patients per year to a bed in the general wards. The contribution will be acknowledged on a tablet in the main corridor of the Hospital.

\$5,000.00 entitles the donor to name a bed in the general wards which shall remain as a perpetual memorial with memorial plate on bed and privilege of nominating a patient to this bed during life of donor.

\$10,000.00 entitles the donor to name a bed in the general wards which shall remain as a perpetual memorial with memorial plate on bed and privilege of nominating a patient to this bed during the life of the donor and one successor.

\$10,000.00 entitles the donor to name a room off the wards which shall remain as a perpetual memorial with bronze memorial plate on door without privilege of occupancy.

\$15,000.00 entitles the donor to name a room off the wards which shall remain as a perpetual memorial with bronze memorial plate on door and privilege of nominating a patient to this room or to a bed in the general wards during the life of the donor and one successor.

\$20,000.00 entitles the donor to name a ward of two to four beds

## ENDOWMENTS AND CONTRIBUTIONS

which shall remain as a perpetual memorial with bronze memorial plate on door and privilege of nominating a patient to a bed in the wards or to a room off the wards during the life of the donor and one successor.

\$25,000.00 entitles the donor to name a room in the Private Pavilion which shall remain as a perpetual memorial with bronze memorial plate on door and privilege of nominating a patient to this room or to a bed in the general wards during the life of the donor and one successor.

\$50,000.00 entitles the donor to name a ward which shall remain as a perpetual memorial with bronze memorial plate at ward entrance with privilege of nominating a patient for occupancy or to a bed in the Private Pavilion during life of donor and one successor.

Every endowment will be acknowledged in the annual report and on a tablet in the main corridor of the Hospital. The occupancy of all the beds shall be subject to the approval of the Trustees and Rules of the Hospital. Special arrangements will be made for corporations and societies.

## GENERAL DONATION FUND

The Endowment Fund, when compared with the funds of other institutions doing a similar work, is very small and entirely inadequate to meet the needs of the Hospital. A large percentage of the Hospital beds are General Ward beds, which are absolutely free or operated at a loss of about forty per cent. If the Hospital is to maintain or increase its present scope of work it must receive assistance from its friends.

As the people of this community come to realize more fully the work the Hospital has done, and is capable of doing, even with its present equipment, and as they see more clearly the opportunity which the Hospital presents for benefiting humanity, they will certainly provide the money necessary for its development.

There are many persons who do not feel that they can donate, at one time, sufficient funds to yield a considerable annual income to the Hospital, but who are willing to make annual contributions to the Hospital of an amount equal to the income from a generous endowment. Such gifts will be placed in the General Donation Fund and are urgently needed.

## BARNES HOSPITAL

### FREE BED FUND

Since the Hospital has been operating only about sixty-five per cent of the available ward beds have been occupied. The most important need of the Hospital is, therefore, additional funds to put these available beds into service. This can be done at a comparatively small extra cost per patient, as the fixed charge will not be appreciably increased.

A subscriber to the Free Bed Fund has the right to nominate a patient according to the following subscriptions:

\$5.00 will pay the hospital expense and treatment of a patient in the general wards for one day.

\$100.00 will pay the hospital expense and treatment of a patient in the general wards throughout his illness. The donor is entitled to nominate one patient to the general wards for the current year.

\$250.00 entitles the donor to name a bed in the general wards for the current year, with right to nominate one patient to the bed.

\$500.00 entitles the donor to name a bed in the general wards for the current year, with right to nominate a patient to the bed, or to a bed in the rooms off the wards.

\$1,000.00 entitles the donor to name a room off the wards for the current year, with right to nominate a patient for occupancy.

Special arrangements will be made for corporations and societies. The occupancy of all beds is subject to the approval of the Trustees and the Rules of the Hospital.

### BENEFICIAL BONDS

In order to raise additional funds and to create an interest in the Hospital, the Trustees are selling what are designated as "Beneficial Bonds." These bonds are issued in denominations of fifty dollars and entitle the purchasers, or their assignees, to that amount of hospital service if used within one year from the date of purchase. In this way the purchaser of the bonds can get actual value in hospital service, either for themselves or others whom they wish to assist, and if any purchaser does not care to use the bonds for either of these purposes, the bonds can be assigned to the hospital and will be applied towards meeting the expense of free treatment for deserving persons. In case the bonds are not used within one year by the purchaser, they revert to the Hospital, which will use them to pay the expense of free treatment to some deserving person.

# Report of the Superintendent

*To the Trustees of Barnes Hospital.*

GENTLEMEN:

I have the honor to present the Annual Report for the year 1920.

There are two respects in which this report differs markedly in its physical make-up from the only annual report issued up to this time. The first change which has been made is that the five statistical tables of Medical Diseases, Surgical Diseases, Gynecological and Obstetrical Diseases, Surgical Operations, and Gynecological and Obstetrical Operations have been omitted. These tables required forty-one closely printed pages in the first report, and it was thought that the probable utilization of these tables did not warrant the financial expenditure nor the use of so great a proportion (35%) of the report. The data has, however, been tabulated and is on file in the Record Room, where it may be consulted.

The second change is the introduction of the professional record of each present and former member of the Staff of the Hospital. It is felt that this will be of interest to all those connected with the Hospital in any way, and it is hoped that it will serve, even if in a small way, as an incentive to progress to all those who have, or have had, a relation with Barnes Hospital.

During the year the position of Clinical Assistant was created at this Hospital, a position to be filled from members of the Dispensary or teaching staff of the Washington University Medical School in the various departments. Their duties are to do work in the wards of the Hospital, and such work as the head of their department shall assign them, but they do not have Private Pavilion privileges.

Mention is made in the Trustees' Report and the Report of the Superintendent of Nurses of the employment of graduate nurses for floor duty, and ward helpers, so that the census of hospital patients might not be diminished nor the quality of service rendered our patients be allowed to deteriorate.

To relieve the overworked information department, and to

## BARNES HOSPITAL

make the admission of patients to the Hospital more expeditious and pleasant, the Trustees in the latter part of the year authorized the employment of an Executive Assistant to the Superintendent. Miss Phebe Carson, a trained nurse with executive experience, began work in this position on November 18, 1920, and was assigned an office opening on the Hospital rotunda. Already it is clear that the move was a good one.

The work done as set forth in the summary on page 26 shows that in spite of the fact that for a period the census of patients had to be sharply diminished until the nursing personnel could be built up by the employment of graduate nurses and ward helpers, the number of patients' days was increased a little.

The increase in the number of employees boarded is due largely to the fact that during the war the Hospital was always understaffed, and this number is an approach to the normal number required. It should also be borne in mind that this number includes employees of the St. Louis Children's Hospital and the Washington University Dispensary, who are boarded at cost for these institutions.

Fortunately, our patients were in a better condition financially than last year, as is shown by the increase in percentage of pay patients, as our daily cost of provisions for all persons boarded, as well as the average cost per patient per day, shows a sharp increase.

I wish to call attention to two conditions in the physical plant of the Hospital which will soon require attention. There are leaks in the roofs of practically all the buildings, and, while not an immediate emergency, they should be attended to during the year 1921.

I also wish to call attention to the condition of the brine pipes of the refrigerating system. Doubtless many reasons contribute to the results, but whatever the causes, it is a fact that there are innumerable leaks of greater or less degree throughout the whole system, which waste the brine, make the system less efficient, and injure seriously the walls and other parts of the hospital construction with which the brine comes in contact. It is greatly to be desired that the necessary changes and repairs be made in the refrigerating system in the not too distant future.

## REPORT OF THE SUPERINTENDENT

On June 12, 1920, the Visiting Staff gave a dinner at the University Club to the House Staff. It is hoped that this will become an annual event and that the *esprit de corps*, which is one of the most valued intangible assets of a hospital, will be increased by it.

I wish to thank the Trustees for the time and thought they have given to the problems of the Hospital, the Staff for their faithful work, and the employees in all departments and in all positions for their loyal service.

Respectfully submitted,

L. H. BURLINGHAM, M.D.,

*Superintendent.*

## Nationality of Patients

	1920
American . . . . .	3,076
Armenian . . . . .	1
Austrian . . . . .	41
Belgian . . . . .	2
Bohemian . . . . .	6
Bulgarian . . . . .	1
Canadian . . . . .	10
Chinese . . . . .	3
Croatian . . . . .	3
Danish . . . . .	2
Dutch . . . . .	1
English . . . . .	19
Finnish . . . . .	1
French . . . . .	4
German . . . . .	67
Greek . . . . .	20
Hungarian . . . . .	15
Irish . . . . .	33
Italian . . . . .	37
Japanese . . . . .	1
Mexican . . . . .	4
Polish . . . . .	14
Roumanian . . . . .	6
Russian . . . . .	112
Scotch . . . . .	8
Slavish . . . . .	1
Spanish . . . . .	1
Swedish . . . . .	5
Swiss . . . . .	3
Syrian . . . . .	2
Turkish . . . . .	1
Welsh . . . . .	1
<b>TOTAL . . . . .</b>	<b>3,501</b>

## Religion of Patients

	1920
Baptist . . . . .	384
Brethren . . . . .	1
Buddhist . . . . .	2
Catholic . . . . .	620
Christian . . . . .	145
Christian Science . . . . .	11
Congregational . . . . .	41
Episcopalian . . . . .	222
Ethical Society . . . . .	2
Evangelical . . . . .	89
Holiness . . . . .	2
Jewish . . . . .	257
Lutheran . . . . .	129
Methodist. . . . .	570
Non-Sectarian . . . . .	672
Orthodox . . . . .	24
Pentecost . . . . .	6
Presbyterian . . . . .	300
Protestant . . . . .	11
Seventh-Day Adventist . . . . .	1
Spiritualist . . . . .	1
Unitarian . . . . .	9
Universalist . . . . .	2
<hr/>	
<b>TOTAL . . . . .</b>	<b>3,501</b>

## Summary of Work Done

	1920	1919
Total patients in Hospital January 1st . . . . .	142	109
Total patients admitted during the year . . . . .	3,501	3,478
Total patients treated during the year . . . . .	3,643	3,587
Total patients discharged during the year . . . . .	3,501	3,445
Total patients in Hospital end of the year . . . . .	142	142
Total free patient days . . . . .	11,087	13,360
Total pay patient days . . . . .	43,031	39,772
Total patient days treatment . . . . .	54,118	53,132
Average patients per day in the Hospital . . . . .	147	146
Average days per patient in Hospital . . . . .	14.86	15.27
Percentage ward patient days . . . . .	.775	.827
Percentage private room patient days . . . . .	.225	.173
Percentage pay patient days . . . . .	.795	.749
Percentage free patient days . . . . .	.205	.251
Average daily number of patients boarded . . . . .	147	146
Average daily number of employees boarded . . . . .	269	249
Daily cost of provisions for all persons boarded	\$0.57	\$0.46
Average cost per patient per day . . . . .	5.49	4.44

## Medical Service

**PERSONNEL.** The organization of the staff on an academic basis was interrupted by the war and it was not until the beginning of the 1919-1920 term that the Department of Medicine had anything approaching a complete staff. The house staff was complete by October, 1919, but owing to the increased cost of labor and supplies and to rising salaries, the laboratory positions could not be filled as planned. The chemical laboratory, which had been dismantled and turned over to the Government as an aviation recruiting station could not be opened for lack of director and staff. All the chemical examinations that cannot be made in the ward laboratories have to be done in the laboratory of the Metabolism Unit.

Dr. W. H. Olmsted, Associate in Clinical Medicine, in charge of that laboratory, has a very efficient staff and carries on not only a large amount of routine clinical work, but also valuable researches, in which several members of the House Staff participate. Dr. Olmsted has official charge of all chemical work in the wards and private pavilion.

The Laboratories of Bacteriology and Serology, under Dr. A. M. Chesney, have an excellent organization. Besides directing the laboratory and prosecuting important researches, Dr. Chesney carries out part of the clinical teaching, and has special charge of all patients with infectious diseases.

The work of the Heart Station was directed for the first half of the year by Dr. F. N. Wilson. After he left for a more lucrative position, Dr. George R. Herrmann, Resident Physician, who had had special training for the position in the Heart Station, took charge, assisted by Dr. Robert Novy, Fellow in Clinical Medicine. Since the last report a new string galvanometer, Williams model, made by Hindle, has been installed and has been highly satisfactory.

Dr. C. H. Eyermann, who has been carrying on investigations in protein sensitization in various conditions, makes the necessary tests in all cases of asthma, hay fever and other diseases requiring that method of diagnosis.

## BARNES HOSPITAL

The heads of Special Departments in the Medical Service are as stated in the Report for 1915-1916, except that Dr. W. B. Spotts has charge of Dentistry.

Negro patients are now cared for in rooms in the north end of the ground floor of the main building. The negro infants and children, since late in 1920, are cared for by the staff of the St. Louis Children's Hospital.

The routine of hospital work is the same as described in the first report.

**GROUP PRACTICE.** The practice of the Hospital has been that of the group, from the beginning. Each patient is referred by his physician to a definite member of the staff, or applies to the Hospital and is then referred to the department indicated by his symptoms. He is then under the care of an organized group having specialized but closely connected duties, exercising mutual criticism and aiming to secure completeness of investigation. For special examinations, either by laboratory or clinical experts, members of any number of departments are asked to see the patient. The request is a written one, and gives the provisional diagnosis with a request for examination and advice regarding the points in question. Very often personal consultations are held. Many patients require a number of such special examinations, and most frequent being those by the Nose and Throat Department on the important and difficult field of sinus disease; Gynecological; Genito-Urinary, on all points of prostate diagnosis and cystoscopic work; General Surgery, on all suspected borderline cases or acute complications; Neurologic and Psychiatric; Dental, on all cases with devitalized teeth, or with suspected foci of infection. At the end of the examination a report is sent to the family physician and, if requested, to the patient.

The service is performing an increasing amount of work in the examination of the physical and functional condition of people not supposed to be ill, especially in men about or after middle age who wish to know how they are fitted for meeting the stress of life in advancing age. Important adjustments are sometimes based on the results of these examinations, and include various details from diet and exercise to business changes.

**PAY FOR MEDICAL SERVICES.** The question of fees has become

## MEDICAL SERVICE

accentuated by the growing complexity of diagnostic procedures. The hospital staff has taken a great interest in the most equitable solution of the problem, and a good deal of material is being gathered from various sources, but at present the matter is still unsettled. The guiding principle in the Hospital is to give the patient the best possible service and to fix a fee that is not out of proportion to the patient's ability to pay.

GEORGE DOCK,  
*Physician-in-Chief.*

## Dental Report

The work of the Dental Department is confined chiefly to dental diagnosis and prophylaxis, especially limiting treatment to scaling and cleaning and extraction and curetting of septic conditions. No attempt is made to fill teeth except in emergencies. The records of examinations and the details of treatment given are filed with the history of each patient. Several thousand teeth are X-rayed annually and many of those showing abscesses are extracted, with the consent of the patient. Several hundred prophylactic treatments have been given and numerous patients instructed how to brush and to take care of their teeth. Numerous special calls to the Hospital and emergency treatments have to be given. An Assistant Dentist for the Medical Service was appointed April 18, 1921, who will assist with the diagnostic, therapeutic and research work, and the service of a social worker has been secured to keep a detailed record of all cases treated in this department.

W. B. SPOTTS, D.D.S.

# Report of the Biological Laboratory

DEPARTMENT OF INTERNAL MEDICINE  
WASHINGTON UNIVERSITY SCHOOL OF MEDICINE

The following numerical summary of the work performed in the Biological Laboratory during the calendar year 1920 is herewith submitted:

## BACTERIOLOGICAL PROCEDURES

### *Blood Cultures:*

Negative . . . . .	277
Positive for typhoid group . . . . .	9
" " pneumococcus . . . . .	4
" " streptococcus haemolyticus . . . . .	6
" " streptococcus viridans . . . . .	7
" " staphylococcus aureus . . . . .	4
" " staphylococcus albus . . . . .	8
" " bacillus coli . . . . .	1
	—
	316

### *Eye Cultures:*

Positive . . . . .	16
Negative . . . . .	6
	—
	22

### *Eye Smears for Gonococci:*

Positive . . . . .	3
Negative . . . . .	2
	—
	5

### *Nasal Cultures for B. Influenzae:*

Positive . . . . .	6
Negative . . . . .	44
	—
	50

### *Throat Cultures for B. Influenzae:*

Positive . . . . .	35
Negative . . . . .	63
	—
	98

### *Nose and Throat Cultures for B. Diphtheriae:*

Positive . . . . .	16
Negative . . . . .	200
	—
	216

### *Throat Smears for B. Diphtheriae:*

Positive . . . . .	0
Negative . . . . .	7
	—
	7

### *Sputum Cultures . . . . .*

### *Tooth Cultures:*

Positive . . . . .	8
Negative . . . . .	1
	—
	9

BARNES HOSPITAL

Pleural Fluid Cultures, Medical Service:			
Positive . . . . .	10		
Negative . . . . .	31		
	—		41
Pleural Fluid Cultures, Surgical Service:			
Positive . . . . .	57		
Negative . . . . .	7		
	—		64
Pericardial Fluid Cultures:			
Positive . . . . .	0		
Negative . . . . .	1		
	—		1
Ascitic Fluid Cultures:			
Positive . . . . .	0		
Negative . . . . .	10		
	—		10
Spinal Fluid Cultures:			
Positive . . . . .	5		
Negative . . . . .	21		
	—		26
Duodenal Contents (Gall Bladder Diagnostic Procedure)			
Cultures . . . . .			14
Urine Cultures for Typhoid Group:			
Positive . . . . .	1		
Negative . . . . .	18		
	—		19
Urine Cultures, Miscellaneous:			
Positive . . . . .	20		
Negative . . . . .	16		
	—		36
Stool Cultures for Typhoid Group:			
Positive . . . . .	4		
Negative . . . . .	20		
	—		24
Joint Fluid Cultures:			
Positive . . . . .			
Negative . . . . .	6		
	—		6
Miscellaneous Cultures, Medical Service:			
Positive . . . . .	8		
Negative . . . . .	2		
	—		10
Miscellaneous Cultures, Surgical Service:			
Positive . . . . .	149		
Negative . . . . .	50		
	—		199
Miscellaneous Cultures, Gyn. and Ob. Service:			
Positive . . . . .	16		
Negative . . . . .	9		
	—		25
Water Examinations . . . . .			2
Tissue Cultures:			
Positive . . . . .	6		
Negative . . . . .	4		
	—		10
Urethral and Vaginal Smears for Gonococci . . . . .			0

## BIOLOGICAL LABORATORY

Autogenous Vaccines Prepared . . . . .	10
<b>Mouse Inoculations for Pneumococcus Typing:</b>	
Type I. . . . .	3
Type II. . . . .	2
Type III. . . . .	9
Group IV. . . . .	16
Pneumococcus not recovered. . . . .	29
	<hr/>
Guinea Pig Inoculation for Tuberculosis:	59
Positive. . . . .	12
Negative . . . . .	32
	<hr/>
<b>TOTAL BACTERIOLOGICAL PROCEDURES:</b>	<b>1,388</b>

### SEROLOGICAL PROCEDURES

<i>Blood Grouping:</i>	
Group I. . . . .	2
Group II. . . . .	40
Group III. . . . .	8
Group IV. . . . .	47
	<hr/>
<i>Widal Test:</i>	
Positive. . . . .	9
Negative . . . . .	21
	<hr/>
<i>Wassermann Reaction:</i>	
Blood. . . . .	{ Positive    2,381
	{ Negative    5,893
Spinal fluid . . . . .	{ Positive    135
	{ Negative    300
Unsatisfactory (Serum Anticomplementary) . . . . .	210
	<hr/>
	8,919
(NOTE.—Any reaction showing plus in either antigen is considered positive in these statistics.)	
<i>Complement Fixation Tests for Tuberculosis:</i>	
Positive. . . . .	44
Negative . . . . .	83
	<hr/>
TOTAL SEROLOGICAL PROCEDURES . . . . .	9,173
TOTAL BACTERIOLOGICAL PROCEDURES . . . . .	1,388
	<hr/>
<b>GRAND TOTAL OF SEROLOGICAL AND BACTERIOLOGICAL PROCEDURES . . . . .</b>	<b>10,561</b>

### COMPARISON OF WORK PERFORMED IN THE BIOLOGICAL LABORATORY IN 1919 AND IN 1920:

PROCEDURE	1919	1920
Blood cultures . . . . .	248	316
Eye cultures . . . . .	45	22
Eye smears . . . . .	5	5
Nasal cultures for <i>B. influenzae</i> . . . . .	0	50
Throat cultures for <i>B. influenzae</i> . . . . .	22	98
Throat cultures for <i>B. diphtheriae</i> . . . . .	184	216

## BARNES HOSPITAL

Throat smears for <i>B. diphtheriae</i>	3	7
Sputum cultures	9	65
Tooth cultures	12	9
Pleural fluid cultures, medical service	58	41
Pericardial fluid cultures	0	1
Ascitic fluid cultures	4	10
Spinal fluid cultures	23	26
Duodenal contents cultures (gall bladder diagnostic)	0	14
Urine cultures for typhoid group	7	19
Urine cultures, miscellaneous	22	36
Stool cultures for typhoid group	10	24
Joint fluid cultures	8	6
Miscellaneous cultures, medical service	16	10
Miscellaneous cultures, surgical service and gynecological-obstetrical service	268	288
Water examinations	15	2
Tissue cultures	7	10
Urethral and vaginal smears for gonococci	2	0
Autogenous vaccines prepared	22	10
Mouse inoculations for pneumococcus typing	18	59
Guinea pig inoculation for tuberculosis	52	44
Blood grouping	63	97
Widal tests	47	30
Wassermann reaction	6,184	8,919
Complement fixation tests for tuberculosis	1,253	127
Complement fixation tests for gonococcus infection	243	0
Shick tests	6	0
<b>TOTAL</b>	<b>8,856</b>	<b>10,561</b>

A study of this table shows that the total number of procedures carried out by the laboratory increased in 1920 over that of 1919 by approximately 1,700 examinations. There was an increase in the number of many of the different kinds of examinations, the important exceptions being the complement fixation tests for tuberculosis and gonococcus infection. Both of these tests were on an unsatisfactory basis in 1919 and were temporarily discontinued. The complement fixation tests for tuberculosis are now being carried out but a satisfactory antigen for use in gonococcus complement fixation work has not been obtained as yet.

It should be noted that the above statistical report comprises only those cultures carried out for the surgical service prior to July 1, 1920. After that date the personnel of the surgical service cared for all the cultures from that service, excepting cultures for the dispensary, and the records of these cultures are not included in the summary.

ALAN M. CHESNEY, M.D.

## Metabolism Unit

This unit of the Medical Service was organized so that the patient could come under the observation of the biological chemist, the physician, and the dietitian at the same time.

There is room for six patients and a good sized kitchen, chemical and respiratory laboratories.

The purpose of the unit is:

First. Research along metabolic lines.

Second. Teaching of medical students the diagnosis and treatment of chemical diseases and of the chemical methods in use, in blood, urine, etc.

Third. Instructing of nurses in collecting urine accurately and acquiring the ability to plan weighed diets according to the physician's prescribed amount of protein, fat, and carbohydrate.

Fourth. The care of patients, especially diabetics, who for proper treatment must have accurate chemical work.

The extent of this routine work is illustrated by the following summary:

BLOOD CHEMISTRY	Total Number of Examinations
Non-protein nitrogen . . . . .	825
Sugar . . . . .	255
Uric acid . . . . .	217
Creatinin . . . . .	164
Sugar curve after glucose meal (each curve based on four blood-sugar determinations . . . . .	788
<b>TOTAL . . . . .</b>	<b>2,249</b>

### BASAL METABOLISM:

The basal metabolic rate is determined routinely on thyroid and other endocrine cases. The determination is done with the portable Benedict apparatus by a technician who is constantly supervised by director. Total determinations, 234.

The above report does not include the large amount of urine work. Severe cases of diabetes are followed by these determinations on the urine: total sugar, total nitrogen, ammonia nitrogen, creatinin, total organic acids. Other work on the urine of nephritic patients includes creatinin, salt, and urea concentrations.

BARNES HOSPITAL

Determination of the carbon dioxide volume per cent is done on all diabetics showing a positive diacetic acid test in urine.

The above report on basal metabolic rate determinations does not include the large number of determinations done as a part of a research problem going on. In this work two other types of respiratory apparatus are in use.

The personnel of staff consists of director, assistant resident physician, dietitian, and two technicians.

W. H. OLMSTED, M.D.

## Hydro- and Physical-Therapeutic Department

The Hydro- and Physical-Therapeutic Department of Barnes Hospital was brought into existence January 1, 1916. That the authorities had a keen foresight as to the value of this work has been evidenced by the large number and great variety of treatments which have been given since that date.

The type of treatments consists of massage; medical and corrective gymnastics; electricity; radiant heat, and baths of various sorts.

The department is equipped to give any type of bath which may be found in any of the sanatoria of the United States or Europe, with the exception of mud baths. Included in these may be mentioned the Nauheim baths, which are given largely in cases of heart and nervous diseases; the continuous bath, used in certain nerve conditions; the Scottish douche and electric cabinet, for eliminative and tonic treatments. The Nauheim baths and electric cabinet are also used for the purpose of reducing high blood pressure.

Radiant heat is the most modern method of heating a joint or paralyzed muscle preparatory to massage because of its great power of penetration.

The department draws its patients from various sources. It receives the largest number from the Washington University Dispensary, which during the past five and a half years has furnished 7,001 pay treatments and 17,536 free, making a total of 24,537 clinic treatments. Barnes Hospital wards have supplied 2,145 pay treatments and 2,527 free, totaling 4,672. The Barnes Hospital Private Pavilion has furnished 2,702 pay treatments and Children's Hospital 670 free treatments.

Contrary to the general opinion, it is not necessary for an individual to be a patient at the Hospital in order to receive treatments in the Hydro Department. Patients may be sent in by outside physicians, not connected with the hospital, or may receive treatment upon advice of the attending physician in the depart-

## BARNES HOSPITAL

ment. During the period above mentioned 9,253 treatments to outside patients were given. These figures show a total of 21,249 pay treatments and 20,636 free treatments, making a grand total of 41,885 treatments given in the department during the period January 1, 1916, to July 1, 1921.

The greatest number of treatments, approximately 40 per cent, were given to defects of bones, joints, and muscles; 22 per cent to diseases of the nervous system; 10 per cent to diseases of the circulatory system; 7 per cent to constitutional diseases; 15 per cent general tonic and eliminative treatments, and 6 per cent miscellaneous.

In addition to treating patients the department has given service in other directions. It has given lecture courses in this work to the Washington University Training School for Nurses; Washington University Medical Students and the Missouri Association for Occupational Therapy. During the war period the department furnished a course in the Officers' School of Oral and Plastic Surgery and also trained a large number of women as reconstruction aides. The department is also prepared to give a normal course in physical therapeutics to such students as wish to perfect themselves in this profession.

F. H. EWERHARDT, M.D.

## Associated Diseases

As in former reports, conditions not included in the main, or "report," diagnosis have been analyzed. Obvious relations, such as pleurisy and pneumonia, are not mentioned. Although the statistical table is not included in this report, it is believed the associated conditions are of interest, and so they are given below:

NUMBER	AGE	SEX	MAIN DIAGNOSIS	ASSOCIATED CONDITIONS
7567	61	W.M.	Perforated gastric ulcers.....	1. Multiple liver abscesses. 2. Sub-diaphragmatic abscesses. 3. Acute diffuse nephritis. 4. Septic pneumonia. 5. Drainage of gall bladder. (Operation). (Autopsy.)
7407	26	W.M.	Addison's disease.....	Syphilis. Alopecia, total. Tuberculosis, chronic pulmo- nary.
7068	38	W.M.	Addison's disease.....	Goitre, simple. Congenital malformation of skull (oxycephaly).
7361	59	W.M.	Aneurysm of Aorta . . .	Syphilis of cerebrospinal meninges.
7041	52	W.M.	Aneurysm of Aorta . . .	Tuberculosis, chronic pulmo- nary.
7696	63	W.M.	Angina pectoris.....	Ulcer of duodenum. Epilepsy.
7490	87	W.F.	Arthritis, chronic infectious.....	Carcinoma of breast.
7494	22	W.F.	Arthritis, syphilitic . . .	Ascaris lumbricoides.
6823	56	W.M.	Auricular fibrillation . . .	Teratoma of right auricle (Autopsy, to be reported by Dr. George Herrmann.)
7440	60	W.F.	Carcinoma of liver and bile ducts.....	1. Acute purulent appendi- citis. 2. Chronic diffuse nephritis. 3. Osteoporosis with fracture of third rib and sternum. (Autopsy.)

BARNES HOSPITAL

NUMBER	AGE	SEX	MAIN DIAGNOSIS	ASSOCIATED CONDITIONS
7257	32	W.M.	Cholecystitis, acute . . .	Calculus in ureter. Ureteral colic.
6816	39	W.M.	Cirrhosis of liver . . . . .	Glycosuria.
6733	47	W.M.	Diabetes mellitus . . . . .	Arteriosclerosis, general. Tuberculosis, chronic pulmonary.
6946	50	W.M.	Diabetes mellitus . . . . .	Tuberculosis, chronic pulmonary.
6983	44	W.F.	Diabetes mellitus . . . . .	Tuberculosis, chronic pulmonary.
7043	50	W.M.	Diabetes mellitus . . . . .	Tuberculosis, chronic pulmonary.
7062	48	W.M.	Diabetes mellitus . . . . .	Tuberculosis, chronic pulmonary.
7424	23	W.F.	Diabetes mellitus . . . . .	Tuberculosis, chronic pulmonary.
7743	33	W.M.	Diabetes mellitus . . . . .	Tuberculosis, chronic pulmonary. (Died.)
6963	55	W.F.	Diabetes mellitus . . . . .	Abscess of lung (Klebs-Loeffler bacillus). (Died.)
6832	70	W.F.	Diabetes mellitus . . . . .	Arthritis deformans. Carcinoma of mammary gland.
7091	21	W.F.	Diabetes mellitus . . . . .	Goitre, simple.
7463	54	W.F.	Diabetes mellitus . . . . .	Goitre, simple.
6950	39	W.M.	Diabetes mellitus . . . . .	Exophthalmic goitre.
6941	33	W.M.	Diabetes mellitus . . . . .	Hypothyroidism. Syphilis.
7471	40	W.M.	Diabetes mellitus . . . . .	Adenoma of thyroid.
7729	67	W.M.	Diabetes mellitus . . . . .	Adenoma of thyroid.
7079	66	W.M.	Diabetes mellitus . . . . .	Carcinoma of stomach. Diverticulosis (colonic). (X-ray, operated.) (Died.)
7562	50	W.M.	Diabetes mellitus . . . . .	Syphilis of cerebrospinal meninges. Cholecystitis. Cholelithiasis. Scabies.
6751	47	B.F.	Exophthalmic goitre . . .	Syphilis. Persistent thymus.
7594	47	B.M.	Foreign body in spine . . .	Stabbed in back three years ago. Knife blade removed by Dr. Sachs. Syphilis.
7315	57	W.M.	Hodgkin's disease . . . . .	Aneurysm of aorta. (X-ray.) (Biopsy of gland)

## ASSOCIATED DISEASES

NUMBER	AGE	SEX	MAIN DIAGNOSIS	ASSOCIATED CONDITIONS
7292	44	W.F.	Leukemia, myeloid . . .	Cholelithiasis.
7717	44	B.M.	Lead poisoning . . . . .	Syphilis. Myocarditis, chronic.
6514	45	W.F.	Myxedema . . . . .	Nephritis, chronic parenchymatous. (Reported by Dr. Dock, 1919.)
7447	36	W.F.	Pellagra . . . . .	Polyglandular syndrome.
7497	36	W.F.	Pyelonephritis . . . . .	Congenital malformation of (colon-typhoid) heart. (Perforation of ventricular septum.)
7468	27	W.F.	Syphilis of cerebro-spinal meninges . . .	Myxedema.
7611	23	W.M.	Taenia saginata . . . . .	Tuberculosis, chronic pulmonary.
7653	37	B.F.	Typhoid (Para B.) . . . . .	1. Acute endocarditis. Iliocolitis (P.M.) . . . . . 2. Thrombosis of uterine and vaginal vessels. 3. Thrombosis of iliac and popliteal arteries (bifurcation). 4. Infarct of spleen. 5. Infarct of lung. 6. Dry gangrene of leg. 7. Tricuspid regurgitation. 8. Chronic pancreatitis. 9. Chronic nephritis. 10. Jaundice.

## Scabies

Scabies had been rare in the Hospital before 1920 and found only in such patients as were prone to it, admitted for other conditions. In the year now reported 15 cases were encountered in the medical service. Four of these were in patients 7562, 50, W.M., Diabetes mellitus; 6498, 20, W.M., Neurasthenia; 6980, 52, W.M., Pernicious anemia; 7649, 76, W.M., Carcinoma of stomach, and were discovered on admission. In case 7377, 17, W. F., scabies dermatitis was the admission complaint. The patient also had appendicitis. In case 7510, 17, W. F., admitted with syphilitic skin ulcers, the scabies developed after a visit from the husband. Three nurses acquired scabies from the patient last mentioned; three others from unknown sources. One house officer in an infected ward got scabies between the fingers. All cases were quickly relieved, as soon as discovered, by the routine treatment. At the time it seemed as if the itch might become as difficult to eradicate as it is in some parts of Europe. This small epidemic shows that constant watching and prompt treatment are sufficient to check it among people of cleanly habits.

## Discrepancies Between the Clinical and Anatomical Diagnosis

From the beginning of the hospital service an earnest effort was made to have the clinical work controlled by expert, objective examinations whenever possible. As in many other hospitals in the United States, the results have been impaired by a widespread objection to autopsies. This objection is not confined to any race, nationality or religion. We find it due chiefly to a misguided sentiment combined with ignorance of the great value of an exact knowledge of disease in various members of families. In some cases relatives have discovered too late the importance of accurate information as to diseases like cancer, diabetes, tuberculosis, insanity, diseases of the heart and blood vessels, and others, but the lesson does not reach a wide circle.

The Hospital depends wholly on permission of relatives to obtain autopsies. It has refused to adopt a contrary rule, such as one requiring an autopsy in every fatal case, because it would cast additional odium on the procedure. In many cases various accidents prevent satisfactory efforts to obtain permission. In some cases the relatives are at a distance. Communication is difficult, sometimes even impossible, for several days. In others the remains must be sent by train and the time-tables interfere with the delay essential to an examination. No matter how distant, an effort is always made to present to the relatives the reasons for holding a post-mortem examination.

Percentage of fatal cases in the Medical Service in which autopsies were made:

1914-1915 . . . . .	51.1
1916 . . . . .	72.9
1917 . . . . .	55.7
1918 . . . . .	48.18
1919 . . . . .	43.75
1920 . . . . .	41.17

In 1920 the number of deaths was 85, of which 35 came to autopsy. The "diagnosis" in each case is made up of a main

## BARNES HOSPITAL

diagnosis, and is followed by a list of all other abnormalities discovered. In the following only the main diagnosis is given as a rule, and is placed in parentheses. Unless stated to the contrary, the main diagnosis was found to be correct. After this are the conditions found at autopsy that were not included in the clinical diagnosis. All cases in which autopsies are made are discussed at the conference held weekly by members of the clinical staffs and the Department of Pathology and the influence of the discussion on the accuracy of clinical work is obvious.

The following discrepancies were encountered in the post-mortem examinations:

1. (Pneumonia, one day in Medical Service.) Ulceration of duodenum, jejunum and ileum; localized fibrino-purulent peritonitis.
2. (Thrombosis of Coronary Artery.) Hydrothorax. (Two days in hospital.)
3. (Pernicious Anemia.) Chronic cystitis and pyelitis; chronic fibrous pleurisy; polyp of stomach; chronic intestinal nephritis.
4. (Mitral and Tricuspid Insufficiency.) Broncho-pneumonia; infarcts of lung.
5. (Influenza; Broncho-pneumonia.) Acute hemorrhagic glomerular nephritis; patency, slight, of foramen ovale.
6. (Tuberculosis, Acute Pulmonary.) Enteritis, ulcerative, tuberculous.
7. (Carcinoma of Liver.) Primary carcinoma of stomach, with metastasis in liver and other organs. Patient under observation one week. Oppler-Boas bacilli in stomach contents should have led to at least mention of the gastric tumor, although the patient was not in condition for thorough examination.
8. (Leukemia, Aleukemic.) Cholelithiasis; chronic cholecystitis, chronic adhesive peritonitis.
9. (Myocarditis with Heart Block.) Epicarditis.
10. (Cerebrospinal Fever.) Chronic fibrous pleurisy; chronic fibrous epicarditis; chronic perisplenitis and perihepatitis. Permission to examine brain and cord refused.
11. (Aortic and Mitral Regurgitation.) Chronic fibrous pleurisy, bilateral.
12. (Pernicious Anemia.) Pericardial effusion (300 cc.); cholelithiasis.

## DISCREPANCIES IN DIAGNOSIS

13. (Typhoid Fever; Paratyphoid B.) Acute endocarditis; mitral and tricuspid; mural thrombosis.
14. (Pernicious Anemia.) Chronic diffuse nephritis; hydropericardium (100 cc.); ascites.
15. (Gastric Ulcer, Perforated.) Chronic adhesive pericarditis; pleural adhesions.
16. (Congenital Heart Lesion.) Patent foramen ovale and interventricular septum; hydropericardium; splenic infarct.
17. (Endocarditis, Mitral, Aortic, Tricuspid.) Hydrothorax, double; ascites (100 cc.).
18. (Carcinoma of Liver; Jaundice; Cirrhosis of Liver; Wilson's Disease[?]) Haemochromatosis. (Patient in hospital two days. Jaundice masked peculiar pigmentation. Wilson's disease not proved.)
19. (Cirrhosis of Liver.) Chronic fibrous pericarditis and pleurisy.
20. (Carcinoma Corpus Uteri; Intestinal Obstruction.) Appendiceal abscess; carcinoma not present.
21. (Aneurysm of Arch of Aorta and Innominate Artery.) Aneurysm of innominate and of descending aorta with vagi and recurrent nerves embedded in the wall of aneurysm; erosion of sixth dorsal vertebra; cirrhosis of liver.
22. (Arteriosclerosis, General.) Carcinoma cervix uteri with metastasis; volvulus of caecum; septicemia.
23. (Lobar Pneumonia.) Cirrhosis of liver, early.
24. (Tuberculosis, Acute Broncho-pneumonic.) Tuberculous enteritis, ulcerative.

The clinical diagnosis of the type of nephritis did not correspond with the anatomical result in five of the thirty-five cases. The differences are not merely those of nomenclature, but depend upon well-known difficulties in renal diagnosis that this hospital, with many others, is endeavoring to eliminate or lessen. Only by extensive comparative studies before and after death can the necessary facts be learned.

## Contributions

Dock, George, M.D. . . . . Oxycephaly and Exophthalmos. Contributions to Medical and Biological Research, dedicated to Sir Wm. Osler, pp. 433-446.

Social Trend in Medicine. Jr. A. M. A. 74: 293, January 31, 1920.

Focal Infection and Arthritis. Medical Clinics of North America, November, 1920.

ROBINSON, G. CANBY, M.D. . . . . Rapidity and Persistence of Action of Digitalis on Heart Showing Auricular Fibrillation. Am. Jr. M. Sc. 159:121, January, 1920.

Value of Large Single Doses of Digitalis in Treatment of Heart Disease. Southern Med. Jr. 13:396, June, 1920.

SMITH, ELSWORTH S., M.D. . . . . Reaction of Cardiovascular Apparatus. Am. Jr. Syph. 4:445, July, 1920.

Cardiolysis for Chronic Mediastino-pericarditis, with Report of Two Cases and Review of Literature to Date. Medical Clinics of North America 4:835, November, 1920.

ENGMAN, M. F., M.D. . . . . Burning Tongue. Arch. Derm. and Syph. 1: 137, February, 1920.

Peculiar Fungus Infection of Skin (Soorpilze). Arch. Derm. and Syph. 1:370, April, 1920.

Early and Late Skin and Mucous Membrane Reactions. Am. Jr. Syph. 4:412, July, 1920.

Some Thoughts on Precedent. Arch. Derm. and Syph. 2:273, September, 1920.

ENGMAN, M. F., M.D. }  
WEISS, R. S., M.D. } . . . . Monilia Candida Infection of Mouth. Arch. Derm. and Syph. 1:119, February, 1920.

SCHWAB, S. I., M.D. . . . . Influence of War Concepts of Mental Diseases and Neuroses. Mod. Med. 2:192, March, 1920; also in Mental Hygiene 4: 654, July, 1920.

MILLS, R. WALTER, M.D. . . . . Five Cases from Neurologic Clinic of Barnes Hospital. Med. Cl. of N. A., November, 1920.

Reactions of Alimentary Tract and Extra-abdominal Viscera. Am. Jr. Syph. 4:453, July, 1920.

Relation of Roentgenology to Clinical Medicine, with Special Reference to Gastroenterology. Am. Jr. Roentgen. 7:523, November, 1920.

MILLS & KIMBROUGH . . . . Radium Treatment of Cancer of Esophagus under Roentgen-Ray Control. Jr. A. M. A. 74:1570, June 5, 1920.

MOOK, W. H., M.D. . . . . Myiasis Dermatosa. Arch. Syph. 1:515, May, 1920.

Skin Reactions to Apothesin and Quinin in Susceptible Persons. Arch. Derm. and Syph. 1:751, June, 1920.

Treatment of Generalized Psoriasis. Arch. Derm. and Syph. 2:447, October, 1920.

## CONTRIBUTIONS

MOOK & WANDER . . . . . Camphor Oil Tumors. Arch. Derm. and Syph. 1:304, March, 1920.

FISCHEL, WALTER, M.D. } . Care of Penetrating Wounds of Chest at Base Hospital. Mil. Surgeon, 46:59, January, 1920.

McCULLOCH, H., M.D. } . Epidemic of Influenza in Army Post of A. E. F. in France. Jr. Lab. and Clin. Med. 6:78, November, 1920.

CHESNEY, A. M., M.D. } . ALFORD, L. B., M.D.. . . . . Consideration of the Nature of the Auræ. Arch. Neur. and Psych. 3:124, February, 1920.

SNOW, F. W } . OLMSTED, W. H., M.D.. . . . . Availability of Carbohydrate in Certain Vegetables. Jr. Biol. Chem. 41:45, January, 1920.

Use of 5 per cent Vegetables in Treatment of Diabetes Mellitus. Med. Clinics of N. Amer. 4:865, November, 1920.

WILSON, F. N., M.D. . . . . Diagnosis of Chronic Myocarditis. Jr. Mo. Med. Assn. 17:403, October, 1920.

WILSON, F. N. } . HERRMANN, G. R., M.D. } . Bundle Branch Block and Arborization Block. Arch. Int. Med. 26:153, August, 1920.

LUTEN, DREW W., M.D. . . . . Errors in Diagnosis and Treatment of Heart Disease. Med. Clinics of N. Amer. 4:877, November, 1920.

STANTON, J. M., M.D. . . . . Epidemic Encephalitis. Critical Review. Mod. Med. 2:353, May, 1920.

Concerning Colloidal Mastic Test. Arch. Neur. and Psych. 4:301, September, 1920.

HERRMANN, G. R., M.D. . . . . Thrombosis of Coronary Arteries with Tachycardia. Jr. Mo. Med. Assn. 17:406, October, 1920.

HERRMANN, G. R., M.D. } . WILSON, F. N., M.D. } . Bundle Branch Block and Arborization Block. Arch. Int. Med. 26:153, August, 1920.

SPOTTS, W. B., D.D.S. . . . . Report on Diseases of the Mouth. Dental Summary, June, 1920.

## Surgical Service

The Department of Surgery is organized on a plan by which it is hoped to give the patients the best possible professional care and at the same time to provide the maximum opportunities for instruction and research. To accomplish this purpose, although the whole service remains under the immediate supervision of the surgeon-in-chief, cases of certain kinds are assigned to specialists in those particular subjects, while the remainder are cared for by the surgeon in chief and his associates on the general service. Thus, the orthopedic cases have been assigned to Dr. Allison, the oral and plastic to Dr. Blair, the neurological surgical cases to Dr. Sachs and the genito-urinary to Dr. Caulk. The laryngological and rhinological cases have been in charge of Dr. Sluder, the otological in charge of Dr. Shapleigh, and the ophthalmological under the direction of Dr. Ewing. The general surgical cases in the St. Louis Children's Hospital have been cared for by Dr. Clopton. All major operations on patients in the Children's Hospital are performed in the operating rooms of the Barnes Hospital. The house staff has been reorganized in such a way that each assistant resident and interne serves a portion of his time not only in the general service, but also in each of the various subdivisions, so that he comes in contact with, and learns the methods used by, each of the various specialists in the care of their cases. For the purpose of administrative control, however, all patients occupying surgical beds in both the Barnes and Children's Hospitals are under the supervision of the resident in surgery who is directly responsible to the surgeon-in-chief of the hospital.

The teaching of students in the Hospital has been conducted during the past year in the same general manner that has been the custom heretofore, namely, by the system of clinical clerks, formal and informal clinics and conferences, and by daily ward rounds with various members of the staff. During the year a new position has been created, that of clinical assistant, which has permitted more of the younger men on the staff to participate in the care of the ward patients under the direction of the surgeon-in-chief.

## SURGICAL SERVICE

The number of patients admitted to the surgical wards of the Barnes Hospital during the year was 1,639. This does not include gynecological cases which, as formerly, have been cared for in the same wards as the obstetrical patients. The number of operations performed, exclusive of gynecological cases, but including major operations on patients from the Children's Hospital, was 1,949. The number of deaths which occurred in the surgical wards of the Barnes Hospital was 79. Many of the patients who died had conditions which were recognized as hopeless at the time of their admission, but were admitted, usually on free beds, for various reasons, sometimes humanitarian and sometimes because they were particularly instructive. The number of autopsies performed on the surgical cases of the Barnes Hospital was 50.

This record of 63 per cent of autopsies is not so good as desired, since it is felt that the autopsy percentage of a service is in general a fair index of the honesty and sincerity of purpose of the men concerned. It is hardly necessary to state, moreover, that, particularly in surgery, there is no more important source of instruction and progress than properly performed autopsies. Whenever a death occurs on the service a persistent effort is made to obtain permission for an autopsy, but various causes have operated to defeat our efforts in 37 per cent of the deaths. It is felt that a statement of these causes might not be out of place in such a report as this, since improvement in this respect can come about only through a more enlightened public opinion. Except for objection because of sentimental reasons, the most important factor has been an ignorant prejudice which frequently expresses itself in the cloak of an alleged religious opposition, but which sometimes is the manifestation of various crude superstitions. Another important cause of difficulty is interference by undertakers who frequently persuade the families to rescind permission already given for the autopsy and who resort to all sorts of tricks and devices to forestall the granting of permission. This attitude is taken by the undertakers simply because of a little extra work entailed in the embalming of the body after an autopsy has been performed. Inability to locate relatives of the patient has resulted in a few instances in failure to obtain the autopsy.

All autopsies that are performed come up for discussion at the weekly clinical-pathological conference attended by the staff.

## BARNES HOSPITAL

Frank discussion is indulged in, and the reasons for any errors made either in the diagnosis or treatment of the condition are gone into thoroughly. In this way the work of the staff is carefully checked up. Lest the laity might feel that undue publicity is given to individual patients whose cases come up for conference in this way, it should be stated that the identity of the patient is not revealed, nor are medical students present.

The activities of the X-ray Department, which comes under the administrative control of the Department of Surgery, are appended in a separate report. During the year arrangements were made for the purchase of 120 milligrams of radium for the treatment of cancer and other conditions.

The clinical laboratory work of the service has been conducted in much the same manner as formerly. Routine examinations of urine, blood, etc., are made by the clinical clerks and house staff. The more elaborate examinations of the various body fluids, as well as determinations of the basal metabolism, are made in the laboratories of the department of medicine by its own trained staff. These examinations include such things as Wassermann tests, blood chemistry, etc. It is felt that by this arrangement not only is much unnecessary duplication of equipment and staff avoided, but that also the quality of work is probably higher than it would be if two competing laboratories existed, each less well equipped and supported than is the case when the work is combined in one.

The tissues which are removed at operation are carefully described, sectioned and preserved in the laboratory of surgical pathology. A careful filing system makes immediately available any record or slide of tissue, as well as the original tissue itself, which has ever been removed from any patient in either the Barnes or St. Louis Children's Hospital. The importance of this to the patient is very great; for it means that at any time in after years, in case of a questionable diagnosis, the condition for which he was originally operated upon can be reviewed and studied again in the light of new evidence. The public should be thoroughly acquainted with the importance to itself of adequate hospital records and should lend its co-operation to some such plan as that of the American College of Surgeons for the standardization of hospitals. Specimens of particular interest and value for

## SURGICAL SERVICE

teaching purposes are included in the general pathological museum. From time to time material in the surgical pathological laboratory is assigned to a student or a member of the staff for study and research.

The most urgent need of the surgical service is more beds, particularly more free beds. The work of the Hospital is seriously handicapped by an insufficient number of free beds, despite the efforts which have been made by the trustees to provide funds. A whole surgical ward still remains empty because of inability for financial reasons to make use of it. The dispensary attendance is rapidly increasing, and a large number of patients who not only need hospital care, but who also are instructive for teaching and study are refused admission to the Hospital because of lack of accommodations for them. The need of money for research purposes is likewise serious. The efficiency of a hospital may be judged to a great extent by the productivity of its staff. If it is not contributing new facts to the sum of knowledge already existent, it is, relatively speaking, going backward; for other institutions with staffs of creative men will be going ahead of it. Medical science, like all science, demands that interest, in the form of new knowledge, be paid on the principal, existing knowledge. Any hospital, therefore, which is not paying this interest is insolvent scientifically. At present the burden of research falls almost entirely upon the already strained budgets of the Medical School. It would be extremely desirable if the Hospital could provide living quarters for a number of fellows engaged in research who at the same time could keep in intimate contact with clinical work in the Hospital. Research in surgery cannot all be done profitably in laboratories detached from the bedside, and the man engaged in such research should not lose or fail to acquire what the French call "the clinical sense," which can be obtained only through contact with the sick. With the facilities already offered by the Medical School, the Barnes Hospital could soon acquire the enviable reputation of being the outstanding place for the training of surgeons throughout the whole Southwest, if more facilities for this purpose could be provided by the Hospital. Another important need concerns the question of the anesthetist to the Hospital. The whole matter of the administration of anesthetics should be under the immediate supervision of a graduate in medicine who

## BARNES HOSPITAL

will devote his entire time to the work. Considerable progress is being made in the subject of anesthesia and there is still much to be learned about it in order to safeguard the patient as much as possible. It would be desirable to secure as chief anesthetist someone who not only is an expert in the administration of anesthetics, but who is also qualified to carry on investigation in this field in addition to teaching and training other anesthetists. Such a person would require a fair salary. At present a splendid opportunity for doing high-grade work of this sort is being missed because of lack of funds for the purpose.

A list of articles published by members of the surgical staff during the year 1920 is here given. Several other articles were in press at the close of the year, but were not due to appear until 1921. They are therefore not included in this report:

### CAULK, JOHN R.

"Hour-Glass Bladder: Remarks on the Resection of the Base of the Bladder for Transverse Septa" (*Annals of Surgery*, vol. LXXI, No. 1, pp. 22-27)

"Urological Findings in Diseases of the Central Nervous System. A Study of Five Hundred Cases" (*Journal of the American Medical Association*, vol. LXXIII, No. 21, p. 1594)

"Infiltration Anesthesia of the Internal Vesical Orifice for the Removal of Minor Obstructions: Presentation of a Cautery Punch" (*Journal of Urology*, vol. IV, No. 5)

### CLOPTON, MALVERN B.

"Excision of the Trochanter of Femur for Tuberculosis" (*Transactions of the Western Surgical Association*, 1919, p. 152)

"Malignant Tumors in Childhood" (*The Journal of the Missouri State Medical Association*, vol. XVII, p. 361)

### GRAHAM, EVARTS A.

"The Maximum Nonfatal Opening of the Chest Wall" (*Journal of the American Medical Association*, vol. LXXIII, No. 26, pp. 1934-1935)

"Sodium Carbonate in Chloroform Poisoning" (*Archives of Internal Medicine*, vol. XXV, No. 6, pp. 575-583)

## SURGICAL SERVICE

"Some Principles Involved in the Treatment of Empyema"  
(*Surgery, Gynecology, and Obstetrics*, vol. XXXI, No. 1,  
pp. 60-71)

"Importance of the Vital Capacity in Thoracic Surgery"  
(*Journal of the American Medical Association*, vol. LXXXV,  
pp. 992-995)

### SACHS, ERNEST

"A Few of the Problems in Neurological Surgery" (*Southern Medical Journal*, vol. XIII, No. 6, pages 434-440)

"A Review of Eight Years' Experience with Brain Tumors"  
(*Archives of Surgery*, vol. 1, No. 1, pp. 74-84)

### WIENER, MEYER

"Some Suggestions in Post-Graduate Teaching of Ophthalmology" (*Archives of Ophthalmology*, vol. XLIX, No. 1, pp. 9-16)

(With G. E. de Schweinitz) "I. Cysticercus of the Vitreous;  
II. Congenital Multilocular Cysts in Relation to the Retina;  
III. Anterior Lenticonus" (*Journal of the American Medical Association*, vol. LXXIII, No. 16, p. 1187)

(With Wm. E. Sauer) "A New Operation for the Relief of Dacryocystitis through the Nasal Route" (*Ibid.*, vol. LXXVI, No. 13, p. 868)

EVARTS A. GRAHAM,  
*Surgeon-in-Chief.*

# Obstetrical and Gynecological Service

The Department of Obstetrics and Gynecology in the Washington University School of Medicine has been directly responsible for the entire Obstetrical and Gynecological Service in Barnes Hospital from the day the Hospital was opened in 1914 to the present time.

During the year 1920, as in former years, the Obstetrician and Gynecologist in Chief to Barnes Hospital was assisted in the care of the ward patients by an associate (Dr. Crossen), by three assistants (Dr. Otto H. Schwarz, Dr. Royston, and Dr. Newell), and by a graded house staff consisting of a resident, two assistant residents and three house officers; small groups of senior medical students acted as clinical clerks, assisting in the keeping of records and in the routine laboratory work.

**FACILITIES.** On the third floor of the Hospital are located the obstetrical wards with accommodations for thirty patients; there also are located the ward delivery room, the ward nursery, the private delivery rooms, the hospital office of the chief, and the living quarters of the house staff. In the space on the first floor of the Hospital set aside for colored patients the service has a delivery room, a nursery, and accommodations for ten patients.

Private maternity cases are admitted to rooms on the third floor of the private pavilion only, on which a nursery for private babies have been established.

Besides its own facilities, the service is entitled to the use of the operating pavilion and enjoys the co-operation of all other departments and laboratories.

## ROUTINE HOSPITAL WORK

**OBSTETRICAL WARD SERVICE.** Many obstetrical patients are referred to the Hospital from the obstetrical dispensary of Washington University; some because their home conditions are not suitable for the safe conduct of labor and puerperium, others because they show abnormalities which make hospital care imperative. Other patients are sent in from the Obstetrical Out-Patient

## OBSTETRICAL AND GYNECOLOGICAL SERVICE

Service when, during labor, complications arise, such as faulty presentation, convulsions or hemorrhage. For these same reasons obstetrical cases are often referred to the ward service by physicians from St. Louis and vicinity.

Cases not in labor are admitted during business hours through the receiving officer of the Hospital after they have been seen by the obstetrical resident or his alternate. Cases in labor and other emergency cases are admitted at all hours, day or night, and are sent to the delivery rooms without delay.

All ward cases are expected to pay, in advance, the ward fee for two weeks; there is no extra charge for the use of the ward delivery room. Those unable to meet this expense may be admitted without pay if free beds are available; emergency cases are always admitted, irrespective of their ability to meet this expense.

After admission to the wards, all cases, with the exception of emergency cases, pass through the usual process of bathing and receiving ward clothing—their own clothing is sterilized and stored. Any immediate attention needed is given by members of the house staff. The record and routine examination of each case is started at once. This includes a complete physical examination, the measurement of the pelvis, blood pressure taking, obstetrical diagnosis and the usual laboratory tests. Any abnormality is brought to the attention of the chief or his assistants during the daily morning rounds.

The assistants, Dr. Otto H. Schwarz, Dr. Royston, and Dr. Newell, alternate every four months between the Obstetrical, the Gynecological, and the Obstetrical Out-Patient Service.

The assistant on the Obstetrical Service goes carefully over all waiting cases, besides looking after the puerperal women and their babies. In a written report he calls the attention of the chief to the more serious abnormalities and makes recommendations for their treatment. The chief looks over these special cases and discusses them in clinical conference with the assistants and the house staff.

When ward cases go into labor, or when they enter the Hospital in that state, they are at once sent to the delivery room, where, under the supervision of the obstetrical head nurse, they are prepared for delivery in the rigid routine way of the service.

## BARNES HOSPITAL

This routine prevents the one great danger to parturient women—*infection*. The other chief complications of child-bearing—*hemorrhage* and *excessive pain*—are controlled by the faithful ministrations of a well trained obstetrical house staff, a member of which is in constant attendance until the case is delivered and returned to the ward.

All complications are at once reported to the obstetrical assistant or to the chief of the service, who responds to such calls at all hours, day or night, and who performs all of the major obstetrical operations.

### SPECIAL FEATURES OF THE OBSTETRICAL SERVICE

**PAINLESS CHILDBIRTH.** The chief of the service has ever been of the opinion that the common practice of letting parturient women endure excessive pain is a grave reflection upon modern medicine, and it has at all times been his aim to make child-bearing as nearly free from pain as the nature of each individual case permits.

Formerly the fear that narcotics and anesthetics might retard or arrest labor and increase the tendency to post-partum hemorrhage was well founded, but at the present time the judicious use of pituitary preparations in connection with narcotics and anesthetics makes it possible to regulate the uterine contractions with great certainty, while at the same time using other remedies to relieve pain, that there is no longer any excuse for letting child-bearing women suffer agonizing pain.

The service makes use of all the various means for relieving pain, according to the nature of the case. It employs chloroform, ether or nitrous oxide-oxygen when conditions are not suitable for “twilight sleep,” but in all suitable cases “twilight sleep,” after the method developed in Barnes Hospital, is our method of choice.

Since the opening of the Hospital, the service has attended approximately 2,300 cases of confinement (398 in 1920). Fully one-third of these cases received “twilight sleep” with perfect satisfaction and without the slightest complication on the part of the mothers or babies arising from this practice.

## OBSTETRICAL AND GYNECOLOGICAL SERVICE

### GYNECOLOGICAL WARD SERVICE

Gynecological ward cases are referred to the service in part from the Gynecological Dispensary and in part by physicians in town and out of town; they pass through the same process of admission described for obstetrical patients. In addition to the ward charges, gynecological patients pay a fee of \$10.00 for the use of the operating rooms and for anesthetics, if they require operation.

All patients, on admission, are seen at once by a member of the house staff, who gives instructions for their comfort or relief. All serious cases are brought to the immediate attention of the assistant on gynecological duty, or of the chief.

The assistant makes ward rounds several times each week, seeing all cases, and submitting a written report with recommendations for treatment; the chief discusses this report in clinical conference with the staff.

A number of the most serious or most interesting cases are reserved for the diagnostic clinic held by the associate, Dr. Crossen, every Wednesday morning. From these cases Dr. Crossen selects a sufficient number requiring operation to enable him to conduct an operative clinic every Thursday morning. The remaining cases requiring operation, and all emergency cases, are attended to by the chief of the service, or, under his supervision, by the gynecological assistant or the resident.

### SPECIAL FEATURES OF THE GYNECOLOGICAL SERVICE

**ROUTINE EXAMINATION OF TISSUES.** The early diagnosis of uterine cancer and the radical removal of the diseased organ are still the safest means for obtaining a certain number of cures. Therefore, all tissues removed at operation or by curettage, are examined in the department's laboratory, established and developed by Dr. Otto H. Schwarz. The microscopical slides are filed away for permanent record, and a report of the findings is sent to the service to be attached to the case histories.

In all doubtful cases the Department of Pathology is freely consulted and renders cheerful and valuable assistance.

## BARNES HOSPITAL

RADIUM AND MASSIVE X-RAY TREATMENT. In July, 1917, a friend of the chief loaned him a sufficient amount of radium to furnish radium treatment to all suitable cases and to determine the value of such treatment in gynecological conditions. This radium consisted of 150 mg. radium-barium-sulphate representing 101 mg. of radium element; it was contained in three capsules representing 25, 26, and 50 mg. of radium element respectively.

Two years of constant use of this radium fully confirmed the effectiveness of radium treatment in certain forms of climacteric hemorrhage, uterine fibroids and uterine cancer. Climacteric hemorrhage was cured in some cases in which formerly the uterus had to be removed; some uterine fibroids disappeared following radium treatment in connection with massive X-ray treatment.

In cases of uterine cancer which were no longer operable because the disease was too far advanced, radium treatment materially lessened the offensive discharge and the pain, while in at least one case it effected a clinical cure.

This patient came under observation in November, 1918. The cancer had started in the cervix uteri and had infiltrated the right broad ligament, rendering the case inoperable. A sample of the growth sent to the laboratory was diagnosed as squamous cell carcinoma. Twenty-four hundred milligram hours of radium treatment were given November 13th, and December 8, 1918, and January 7, 1919. The infiltration in the broad ligament disappeared; the ulcer in the cervix healed and the patient has enjoyed perfect health ever since. At this writing—two and one-half years after the first treatment—there is no sign of the return of the dread disease.

Considering these encouraging results of radium treatment, the chief felt that no gynecological service can do justice to its patients without a sufficient supply of radium, and when it became necessary to return the 101 mg. of radium to its owner, he made arrangements to secure the loan of the needed radium from case to case until the time should come at which Barnes Hospital would have a radium supply of its own. This time has now happily arrived, the new radium supply is in charge of the X-ray Department and available for all services of the Hospital.

OBSTETRICAL AND GYNECOLOGICAL SERVICE FOR PRIVATE PATIENTS. All staff members of the Obstetrical and Gynecolog-

## OBSTETRICAL AND GYNECOLOGICAL SERVICE

ical Service in the Barnes Hospital have the privilege of sending a limited number of their own patients to the private pavilion. An assistant resident has the special duty of receiving such private patients, of looking after their comfort and of carrying out the instructions of the respective staff members. For the use of the private delivery rooms a fee of \$15.00 is charged. There are no other extras.

The number of private maternity cases is steadily increasing (161 in 1920). The nursing service has proven so satisfactory that in most cases it has not been necessary to employ special private nurses, thus rendering the stay in the fire-proof hospital not only safer and more comfortable, but likewise more economical than delivery in the home of the patient could have been.

HENRY SCHWARZ,  
*Obstetrician and Gynecologist-in-Chief.*

---

## LIST OF PUBLICATIONS, 1920

### H. S. CROSSEN, M.D.

"Operative Gynecology" (2nd Edition, C. V. Mosby Company, 1920, pp. 717, pl. 834)

### GEORGE GELLHORN, M.D.

"Secondary Syphilis of the Uterus" (Surgery, Gynecology and Obstetrics, vol. XXIX, No. 4, pp. 374-376)

"A Critique of New Books on Gynecology and Obstetrics" (Ibid., vol. XXX, No. 4, pp. 423-425)

"Syphilis in Women" (American Journal of Syphilis, vol. IV, No. 3, pp. 480-483)

"The Reaction of Syphilis in Women" (Paper before the St. Louis Medical Society, December 9)

### Q. U. NEWELL, M.D.

"Full-Term Extra-uterine Pregnancy" (Journal of Missouri Medical Association, September, 1920, vol. XVII, p. 357)

"Prenatal Supervision" (Paper before the Southern Medical Association at Louisville, Ky., November 15)

BARNES HOSPITAL

GRANDISON D. ROYSTON, M.D.

"Chorea Gravidarum" (Transactions of the American Association of Obstetricians and Gynecologists, vol. XXXIII, pp. 303-317)

OTTO H. SCHWARZ, M.D.

"Adenomyoma, with Special Reference to Those Occurring in Broad Ligament" (Journal of Missouri Medical Association, March, 1920)

"Submucous Adenomyoma" (Transactions of the American Association of Obstetricians and Gynecologists, vol. XXXIII, pp. 236-248)

FRED TAUSSIG, M.D.

"An Analysis of the Failures in Radium Treatment of Cervical Cancer" (American Journal of Obstetrics and Gynecology, vol. 1, p. 113)

"Five-Year Radium Cures of Cervical Cancer, Collective Review" (American Journal of Obstetrics and Gynecology, vol. 1, p. 314)

"Precancerous Lesions of the Skin of Vulva (Leukoplakic Vulvitis)" (Archives of Dermatology and Syphilology, June, 1920, pp. 621-635)

# Report of the Department of Pathology

The activities of the Department of Pathology in relation to the Hospital may be described as follows: (1) Performance of autopsies. (2) Providing opportunities for study to physicians and instruction to the nursing staff (the instruction of medical students being in the present connection excluded from consideration). (3) Conduct of investigation with purpose of adding to medical knowledge.

(1) During 1920 autopsies were performed as follows:

Service	Deaths	Autopsies	Per Cent
Obstetrical . . . . .	2	2	100.00
Gynecological . . . . .	9	4	44.44
Medical. . . . .	85	35	41.17
Surgical. . . . .	79	50	63.29
<b>TOTAL . . . . .</b>	<b>175</b>	<b>91</b>	<b>52.00</b>

The importance of performing autopsies on those who die in the Hospital is thoroughly recognized by the clinical staff and earnest effort is made by the physicians and surgeons in charge of patients to obtain the consent of relatives to this examination, which represents one of the most effective means for elevating the standard of medical and surgical practice. The frequency with which autopsies are performed may be regarded as an index of the standing of the Hospital. The proportion of autopsies to deaths in this Hospital compares favorably with that of other well organized hospitals in Boston, Baltimore, Chicago, Philadelphia and New York. In the southern and western parts of this country (San Francisco excepted) the importance of a pathological laboratory in the conduct of a hospital is less clearly recognized.

(2) During the past year clinical pathological conferences have been held each week on Thursday afternoon. Fatal cases are discussed in the light of the condition found at autopsy, the results of bacteriological and histological examinations are presented,

## BARNES HOSPITAL

and in suitable instances illustrated by lantern slides, and the attempt is made to determine what mistakes, if any, have been made. These conferences are not for undergraduate medical students, but are attended by the interne and visiting medical and surgical staffs of the Hospital, by other physicians associated with the Medical School, by physicians taking post-graduate work in the schools and by visiting physicians. The attendance upon these conferences during the past year has been greater than heretofore and the value to the interne staff more fully appreciated.

The usual course in bacteriology for nurses has been given by the Pathological Department.

(3) Investigation in progress in the department is indicated by the following publications by members of the staff or by others temporarily associated with the department:

PIERCE, E. L., and ANDERSEN, HANS.—First Infection with Tuberculosis by Way of the Lungs. *American Review of Tuberculosis*, Vol. IV, No. 9. November, 1920, pp. 629-639.

PIERCE, E. L.—First Infection with Tuberculosis by Way of the Intestinal Tract. *American Review of Tuberculosis*. Vol. IV, No. 9. November, 1920, pp. 641-648.

PIERCE, E. L.—The Pathology of Pneumonia Following Influenza. *Bulletin of the Washington University School of Medicine*, Series III, Vol. XIV, February 16, 1920.

BURROWS, MONTROSE T.—Neuritis of the Cranial Nerves in Lethargic Encephalitis and the Differential Anatomic Diagnosis between it and Acute Poliomyelitis. *Archives of Internal Medicine*, October, 1920, Vol. XXVI, pp. 477-509.

McJUNKIN, F. A.—Tuberculosis in Guinea Pigs with an Experimentally Produced Endothelial Leucocytosis. *The Journal of Medical Research*, Vol. XLII, No. 2, November, 1920, pp. 201-207.

BELL, HOWARD H.—Relation of Different Strains of Influenza Bacilli as Shown by Cross Agglutination and Absorption Tests. *The Journal of Infectious Diseases*, Vol. XXVII, No. 5, November, 1920, pp. 464-475.

## DEPARTMENT OF PATHOLOGY

McJUNKIN, F. A.—Tuberculosis in Guinea Pigs with an Experimentally-Produced Endothelial Leukocytosis. *The Journal of Medical Research*, 1920, Vol. XLII, No. 2.

GRANT, SAMUEL B., MUDD, STUART, and GOLDMAN, ALFRED.—A Further Experimental Study on Excitation of Infections of the Throat. *The Journal of Experimental Medicine*, Vol. XXXII, No. 1, July 1, 1920, pp. 87-112.

(The Boylston Prize was awarded to Dr. Stuart Mudd, Dr. Samuel B. Grant, and Dr. Alfred Goldman for their research on "The Effect of Chilling on the Mucous Membrane of the Throat and Tonsils," made in this laboratory.)

ASAMI, GOICHI, and DOCK, WILLIAM.—Experimental Studies on Heteroplastic Bone Formation. *The Journal of Experimental Medicine*, Vol. XXXII, No. 6, December, 1920, pp. 745-766.

The Department of Pathology not only offers a training to those who wish to become pathologists, but furthermore furnishes opportunity for a period of study in pathology to those who wish to become internists and surgeons and at the same time desire a broad foundation in the fundamental sciences of medicine. A year or more of work in pathology taken either before or after or in place of an internship gives an insight into the pathology of disease which cannot be so readily acquired at any other period of medical study and represents an essential part of the training of a very large proportion of those physicians and surgeons who have taken the highest places in medicine. This opportunity is open to the resident staff of the Hospital.

EUGENE L. OPIE,  
*Pathologist-in-Chief.*

# Report of the X-Ray Department of the Washington University School of Medicine

The X-ray Department of the Washington University School of Medicine, with quarters in the Barnes Hospital, is now carried as an adjunct to the Department of Surgery, and supplies X-ray service to the Barnes Hospital, the Saint Louis Children's Hospital and to the Washington University Dispensary, as well as to physicians who are not connected with the staff of the school or hospitals, at the discretion of the director.

In the year 1920 there were 7,290 admissions to the department, of which 590 received therapeutic applications. The admissions were contributed by the institutions as follows:

Barnes Hospital . . . . .	1,530
Children's Hospital . . . . .	660
Washington University Dispensary and Extramural . .	5,100

In giving these totals of admission for services, the department recognizes that it has not touched the real work of an X-ray department in a teaching hospital. This condition has been brought about largely by the fact that it lacks an adequate independent endowment. Every X-ray department whose work is so largely on charity patients has problems and conditions which can be met only by a considerable expenditure of money. It may seem wise in the future to create an independent status for it rather than to continue it as an appendage to some other department.

Owing to the enormous growth in the activities of the department since its inception, the present quarters are now very inadequate; its directors are now so occupied with the routine work of the department as to prohibit any productive work in the way of investigation and original study. The enormous accumulation of material, therefore, goes unworked. As a field for investigation, X-ray work is so new as to offer tremendous opportunities for valuable contributions to medicine. Additional fluoroscopic

## X-RAY DEPARTMENT OF THE MEDICAL SCHOOL

rooms are needed, as is also another dark room. From a therapeutic aspect, the greatest lack is treatment rooms with the necessary equipment to meet the demands made on the department. The facilities for the filing of X-ray negatives are unsatisfactory, causing a great waste of time because of the inconvenient location of the storage room, which makes the intensive study of a large series of X-ray examinations almost impossible.

The most urgent need in equipment is apparatus for therapeutic applications in which great advances have recently been made. More apparatus is needed for fluoroscopic work to be used in the additional rooms which must be provided. Second to apparatus is the need for proper electrical power for the department. The present direct current is not satisfactory. As a corollary to this physical expansion of the department an increased personnel is a necessity.

SHERWOOD MOORE, M.D.

*Director.*

# Report of the Washington University Training School for Nurses

FOR THE YEAR ENDING DECEMBER 31, 1920

The Washington University Training School, which supplies the nursing personnel of the Barnes and Children's Hospitals and the Medical School Dispensary, has, with other training schools throughout the country, been much handicapped during the past year by a shortage of pupil nurses. This does not mean, however, that our actual enrollment of pupils is much less than last year. On December 31, 1919, 106 pupils made up the undergraduate body of the school. One year later—1920—our enrollment was 100 pupil nurses. Thirty-six new pupils have been admitted. This included a class of 27 in September, the largest group that has ever entered the school at one time. Thirty-four seniors have graduated, 3 pupils have resigned, and 2 nurses were dropped during the last year.

A year ago we had with us 25 nurses from the Army School of Nursing, who came for a four months' course in pediatrics and four months in obstetrics. They have in groups completed their courses and have left gradually without replacement, leaving our nursing force reduced by one-fifth. Taking this reduction into account in the light of the fact that the hospital demands on the Training School are steadily increasing, one realizes that we are obliged to meet some very difficult problems in our nursing work.

The class work of the year has continued on very much the same lines as heretofore, although certain courses have been increased to more nearly approach the standard curriculum as outlined by the National League of Nursing Education. This development is chiefly in the laboratory courses taught at the Medical School. The chemistry course particularly has been very much improved, and the nurses are showing considerable more interest in their academic work.

Our Training School instructor has followed more generally than heretofore all lectures with quiz classes, a method that has

## TRAINING SCHOOL FOR NURSES

done much to improve the general quality of class-room instruction.

Early last summer it became evident that since more nurses were graduating than were entering the school, it would be necessary to either reduce the number of admissions to the hospitals or in some way supplement our nursing force. Although the latter plan meant the expenditure of considerable money, the trustees of the Barnes Hospital and the managers of the Children's Hospital decided that it was the best course to follow. In both institutions we therefore employed graduate nurses for floor duty, and in the Barnes Hospital have secured a limited number of "ward helpers," untrained women to assist in the wards. This latter group are able to relieve the nurses of certain household duties, leaving them free to devote more of their time to the actual care of patients. We feel convinced that such a group of people should be a permanent factor in training school organization, and may eventually develop, if given sufficient instruction and supervision, into what is termed the trained attendant.

For several years we have felt the need of additional housing facilities, for the school quarters in the Service Building have not been altogether satisfactory, and the limited space in the Nurses' Home necessitated using many single rooms for two nurses each. But everyone appreciated the fact that building during the past five years has been impossible; so no special agitation of the subject was entertained until about a year ago. The cost of building still prohibited the erection of the desired addition, but, feeling that something must be done, the University decided on a partial addition which would give us space for 60 nurses and thus do a little more than relieve the present crowding. Ground for this building was broken on May 20, the day after the Training School graduation. Besides bedrooms, this wing will give us an added classroom and an office for the instructor, both of which are very much needed. We are still dreaming for the not too distant future of a much larger building that can house all the various activities of the Training School.

The much heard phrase, "the shortage of nurses," has sounded throughout the country. It is not peculiar to our own school or our own locality. Indeed, we have probably suffered much less than have most of the schools in Missouri. In studying the

## BARNES HOSPITAL

situation it has become very evident that those training schools having the highest educational standards have been most successful in filling their ranks with desirable young women from the high schools and colleges. Because of our university affiliation this school has an unusual opportunity to develop along educational lines, if we can but strengthen this connection. This we hope to do during the coming year in order that the Washington University Training School may strengthen its position in the foremost ranks of nursing schools of the Middle West.

HELEN WOOD,

*Superintendent of Nurses.*

## The Washington University Dispensary

The Washington University Dispensary is the Out-Patient Department of Barnes Hospital and the St. Louis Children's Hospital. It is situated on Euclid Avenue, north of Kingshighway, and is in direct communication with the hospitals.

The Dispensary is conducted by a committee of ten members appointed by the Dean of Washington University School of Medicine. Eight of these are members of the faculty, the other two are the head of the Social Service Department and the superintendent of the Dispensary. This committee meets once a month. The superintendent of the Dispensary works under the direction of the committee, to whom she makes a monthly report concerning receipts and expenditures, the number of patients treated in each clinic and the attendance of the staff. She is responsible for the daily activities of the Dispensary, for all supplies and equipment, and for the admission of patients to the Dispensary.

The Dispensary occupies the first floor and basement of the so-called Clinic Building, which is situated at the northeast corner of the Hospital grounds. The building is 232 feet long and 60 feet wide. On the first floor are the clinics of medicine, surgery, pediatrics, and obstetrics and gynecology. On the basement level, which is perfectly lighted by large areaways, are the clinics of ophthalmology, laryngology, rhinology, otology, neurology, dermatology, genito-urinary surgery and orthopedic surgery.

The east end of the first floor is devoted to the superintendent's office, a room for the temporary isolation of suspected cases of contagious diseases, the record and drug rooms and a small office for the Social Service Department. The Social Service Department now contains fourteen paid workers in addition to the director, and twenty volunteer clinic secretaries. There is space in the basement for supply rooms, a sterilizing room, a sewing and linen room, and locker rooms for the staff, for nurses, and for employees. The laboratories of the Department of Internal Medicine and the Department of Pathology occupy the upper three floors of the building.

## BARNES HOSPITAL

The number of visits made to each department is shown in the following tables:

	1918
Medical . . . . .	12,243
Tuberculosis . . . . .	5,459
Surgical . . . . .	10,636
Genito-Urinary . . . . .	12,685
Orthopedic . . . . .	7,425
Dermatology . . . . .	21,514
Ophthalmology . . . . .	11,647
Otology . . . . .	4,528
Laryngology . . . . .	8,589
Gynecology . . . . .	5,526
Obstetrics . . . . .	2,062
Neurology . . . . .	3,288
Pediatrics . . . . .	10,597
Well Babies . . . . .	886
Diabetic . . . . .	234
Night Clinic . . . . .	6,074
<b>TOTAL . . . . .</b>	<b>123,393</b>

	1919
Medical . . . . .	12,206
Tuberculosis . . . . .	4,511
Surgical . . . . .	9,626
Genito-Urinary . . . . .	13,912
Orthopedic . . . . .	5,797
Dermatology . . . . .	18,163
Ophthalmology . . . . .	12,123
Otology . . . . .	4,803
Laryngology . . . . .	10,807
Gynecology . . . . .	5,667
Obstetrics . . . . .	2,266
Neurology . . . . .	3,188
Pediatrics . . . . .	10,181
Well Babies . . . . .	538
Diabetic . . . . .	300
Night Clinic . . . . .	7,750
<b>TOTAL . . . . .</b>	<b>121,838</b>

	1920
Medical . . . . .	14,160
Tuberculosis . . . . .	4,342
Surgical . . . . .	9,672
Genito-Urinary . . . . .	13,051
Orthopedic . . . . .	5,142
Dermatology . . . . .	18,709
Ophthalmology . . . . .	12,117
Otology . . . . .	5,831
Laryngology . . . . .	10,812
Gynecology . . . . .	6,405
Obstetrics . . . . .	2,529
Neurology . . . . .	4,514
Pediatrics . . . . .	10,773
Well Babies . . . . .	.....
Diabetic . . . . .	249
Night Clinic . . . . .	10,001
<b>TOTAL . . . . .</b>	<b>128,307</b>

## THE WASHINGTON UNIVERSITY DISPENSARY

Owing to the increase in cost of all commodities and labor, it has been necessary in the past year to increase the registration fee from ten cents in 1914 to thirty cents for the first visit and twenty-five cents for subsequent visits. Other charges are made for ether, plaster dressings, special drugs, for X-ray service, and for treatment in the Hydro-Therapeutic Department. Charges are omitted by the superintendent whenever it has been satisfactorily shown that the patient is unable to pay even these small fees. The registration fee was omitted in 22,109 cases in 1918, in 27,770 cases in 1919, and in 29,338 cases in 1920.

The thousands of patients cared for annually by the Dispensary are from the poorest of the city. A relatively large proportion of patients are unable to meet the Hospital fees required for ward treatment. These make such a great demand on the Hospital for free beds, which the Hospital with its limited endowment is not always able to meet, that the Social Service Department is kept very busy providing proper treatment for some of these cases. The number of patients requiring free treatment is so huge that no single hospital, even if very heavily endowed, could take care of all such cases. The selection of cases by the Dispensary staff is a potent factor in applying to the best advantage the facilities of the Hospital.

ERNEST SACHS, M.D.

*Chairman Dispensary Committee.*

## Social Service

The Social Service is responsible for all social work done for patients in the Barnes Hospital, as well as for those in the St. Louis Children's Hospital, and in the out-patient clinics which are conducted by the Washington University Medical School. It is maintained by the St. Louis Association for Social Work, an organization which has grown out of the small committee of women from the Board of the Children's Hospital, who started the work in that institution in 1910, and later extended it to include service for adults under the care of the medical staff of Washington University.

The staff of the Social Service has steadily grown until in the year 1920 it has included, besides the head worker, fourteen social workers and three clerical workers. The social workers include four children's workers, one of whom, in charge of the work for children with heart trouble, is also caring for the adults with heart trouble under the care of the Medical Department; two workers for patients suffering from syphilis and coming to the skin clinic; one worker for patients under the care of the Tuberculosis Department; one for those under the care of the Orthopedic Department; one for the patients coming to the night clinic; one for those under the care of the General Medical Department; one for the patients referred from the clinics for which we have no special worker; two workers serving in the Obstetrical Department; and one worker in the Neuro-Psychiatric department.

We have three workers responsible for the social work for patients on the wards. These are our worker for the General Medical Department, our head worker for the Obstetrical Department, and our worker who cares for cases referred from clinics for which we have no special worker and who is responsible for work for the Surgical Department. They are responsible for the work on the medical wards, the obstetrical wards, and the surgical wards, respectively.

Our social work in the Washington University Dispensary and the Hospitals is necessarily so interrelated that it is difficult to distinguish the work of one institution from that of another.

## SOCIAL SERVICE

Patients are in the great majority of cases examined in the Dispensary before they enter the Hospital and are likewise advised to continue under the observation of the Dispensary after discharge from the Hospital. The work of the Social Service, as it effects increased co-operation with the physicians on the part of the patients and contributes knowledge of social conditions which may be causal elements in the medical condition or co-existing factors, is essential to the efficiency of the medical work. The medical care of the Dispensary and the Hospitals, as it is organized, is a continuous service and so must the social work be. Any worker on our staff who has made the personal contact with a patient and begins carrying the responsibility of adjusting mal-conditions in the patient's life and home is expected to complete the work if the patient or any member of his family enters the Hospital. However, there are few cases on the wards that are not being cared for by the ward workers. In cases carried by other workers the ward worker serves as the responsible link between the clinical social worker and the medical and nursing services on the ward.

The ward workers attend their respective clinics—the medical, surgical and the obstetrical clinics—and there the doctors refer to them, as a matter of routine, all cases needing hospital care. An early understanding of the patient's social conditions makes it possible for the worker to assist in making proper and timely social adjustments which may be most essential to proper and timely medical care, or convalescent or institutional care.

Frequent conferences between the doctors and the social workers on the wards are often necessary when the social conditions have a direct bearing on the medical conditions and vice versa. It is important that the social worker know the medical diagnosis and prognosis as soon as possible, and often equally important that the doctor know the social diagnosis and prognosis. These conferences result in the best and most complete plans and treatment, and when a patient no longer needs hospital care, there need be no unnecessary delay in his discharge, the social worker having previously been told when that was to be, and having satisfactorily arranged for his social care afterwards. A joint meeting of the medical and social staffs on the wards, held recently, resulted in the establishment of regular weekly conferences

## BARNES HOSPITAL

between the resident physicians and the social workers of their respective wards in addition to any conference needed on any special case during the interval. These additional conferences will effect increased efficiency in both the medical and social work.

### THE WORK ON THE OBSTETRICAL WARDS

The workers on the obstetrical wards are nurses. The assistant, who was added to our staff this year, takes responsibility for the supervisory work both on the wards and in the homes. The head worker is responsible for the clinic work and all the necessary social adjustments which may involve ward visiting. It is the concern of this department of our work that all is in readiness for the home delivery or that the arrangements for hospital care are made when that is advisable. Where social problems exist, endeavor is made to correct or prevent the mal-adjustments, sometimes with the co-operation of other social agencies.

After the baby is born the mother is urged to keep the infant under the supervision of a well-baby clinic, either our own or one maintained by the city, depending on the district in which the mother lives.

In the past year of 1920, 992 new cases were cared for by the prenatal worker. Approximately four per cent of these were cases in which intensive social case work was required. The remaining cases required instructive and supervisory work.

### THE WORK ON THE MEDICAL WARDS

The social worker for the General Medical Department, including the gastro-intestinal and diabetic divisions, attends the medical clinic every morning. The cases demanding her attention are chiefly those of patients suffering from heart trouble or neurasthenia. These invariably need to change their living and work conditions, sometimes after a brief period in the Hospital. The Junior League Workshop and the Placement Bureau for the Handicapped have helped remarkably in these cases. With complete adjustment of the social conditions the symptoms of disease often disappear.

## SOCIAL SERVICE

The worker for the Medical Department cared for 653 new cases during the past year. Approximately twenty-five per cent of them required social readjustments, the remainder supervisory work.

### THE WORK ON THE SURGICAL WARDS

The worker for the surgical wards is in the surgical clinic every morning to receive patients referred to her by the doctors and assist in making arrangements for care on the wards. Many of the patients needing operations present social conditions as acute and urgent in their need of immediate care as the medical conditions. The worker is also concerned in seeing that the period of convalescence is spent under the best possible conditions.

Eleven hundred and seventy-nine new cases were referred to this worker in the past year. Of these approximately forty per cent required social adjustments; the remaining cases required supervisory work.

The St. Louis Association for Social Work publishes a separate detailed report on the work of the Social Service Department and will send it upon request to anyone interested.

LOUISE H. WENZEL,  
Director.

## Library Report

It has been interesting to watch the development of the library since May, 1915, when it made a modest start with a total of 75 books. Since then the collection has increased until it now numbers 1,200 volumes and occupies all the shelf space available.

Reading goes on in all parts of the Hospital. Not only are the patients provided with reading matter, but doctors, nurses, and employees as well avail themselves of the opportunity offered. In order to give better service to patients a volunteer library corps was organized and a regular day selected for weekly distribution of reading matter. In the early days the faithful library worker carried a basket of books from bed to bed. Later a friend donated a tea-cart, which by the addition of a rail became a book truck. This enabled the volunteers to accomplish book distribution with far less wear and tear and also gave the patient a greater chance of variety in the selection of books brought to the bedside.

Quite a large number of patients stay in the Hospital for only a few days. This fact made it seem desirable to issue books through the Hospital twice a week. To accomplish this the library corps of volunteer workers was increased and divided into a Monday and a Thursday team. After a while the improvised book truck showed signs of giving out, and the volunteer workers gave the library a substantial book truck, built especially for hospital service, which arrived in the spring of 1920, just as its predecessor lost all the remaining spokes in its wheels, and, like the "one-hoss shay," went all to pieces.

The new truck is a joy. It holds at least 75 books, has swivel wheels and is not heavy to push. It goes comfortably between the beds and gives the patients a much larger variety of titles for selection.

Books in foreign languages are of value in a hospital collection. Many patients have little or no English, and yet desire to read. There is a distinct value, not only to the alien but to the hospital,

## LIBRARY REPORT

in this demonstration of a real concern in his happiness and contentment, which creates a confidence that often helps where the lack of a common language makes explanations inadequate.

It is not unusual to have a doctor come to the library and present this sort of a problem: here is a man from out of town who needs to remain in the Hospital a few days longer than he expected. He is restless and needs something to divert his mind. The librarian asks a few leading questions about the age and educational background of this individual, and ascertains whether exciting books are undesirable. With the information needed, she makes her selections and carries the books to the patient.

Another patient to cater to is a highly nervous woman who must be interested but not excited. Here again the librarian must know age and educational background, as well as any points which might make a haphazard selection undesirable.

Many books and magazines, as well as the book truck, have been donated this year. The Hospital desires to again express its appreciation to the friends who have so generously made these contributions.

This report would be incomplete without mention of the valuable assistance and hearty co-operation of the Public Library. We are one of the traveling libraries of the St. Louis Public Library. Most of our foreign-language books come from this source. A special short loan plan enables us to secure books and pamphlets for a few weeks for class work. Much has been made possible through the connection with the Public Library that otherwise would have proved impossible.

To the volunteer workers who have come so faithfully through rain, snow or midsummer heat, and who have given so freely of their time, strength, and energy, thanks are due. To them more than to anyone else belongs the credit of making the books available to the patients who are unable to obtain them without assistance.

The following table showing the increasing use of books will prove of interest. It must be borne in mind that about three-fourths of the reading is done by patients, while doctors, nurses, and hospital employees make up the remaining fourth.

## BARNES HOSPITAL

Years	Number of Books Issued
1915 . . . . .	1,308 (8 months only)
1916 . . . . .	3,316
1917 . . . . .	4,688
1918 . . . . .	5,097
1919 . . . . .	5,617
1920 . . . . .	6,454

ELIZABETH GREEN,  
*Librarian.*

## Trustees

RICHARD M. SCRUGGS . . . . . 1892-1905

SAMUEL M. KENNARD . . . . . 1892-1916

SMITH P. GALT . . . . . 1892-1905

SAMUEL CUPPLES . . . . . 1905-1912

MURRAY CARLETON . . . . . 1905-1916

LON. V. STEPHENS . . . . . 1912-1915

L. RAY CARTER. . . . . 1915

FRANK C. RAND . . . . . 1916

PAUL BROWN. . . . . 1916

# Hospital Staff

## ADMINISTRATION

L. H. BURLINGHAM, M.D.	. . . . .	<i>Superintendent</i>
W. S. CARTER, M.D.	. . . . .	<i>Assistant Superintendent</i>
PHEBE CARSON, R.N.	. . . . .	<i>Executive Assistant</i>

## MEDICINE

GEORGE DOCK, M.D.	. . . . .	<i>Physician-in-Chief</i>
ELSWORTH S. SMITH, M.D.		
ALBERT E. TAUSSIG, M.D.		
WALTER FISCHEL, M.D.		
JEROME EPSTEIN COOK, M.D.		
WALTER BAUMGARTEN, M.D.		
ALAN M. CHESNEY, M.D.		
WM. H. OLNSTED, M.D.		
DREW LUTEN, M.D.		
C. H. EYERMAN, M.D.		
G. W. WILSON, M.D.		
GEORGE R. HERRMANN, M.D.	. . . . .	<i>Resident Physician</i>
ANDREW B. JONES, M.D.		
LEE P. GAY, M.D.		
E. H. TERRILL, M.D.		
ROYAL W. RUDOLPH, M.D.		
EDWARD W. OCHSNER, M.D.		
FRED B. JOSTES, M.D.		
JAMES A. EVANS, M.D.		
DONALD F. KUDNER, M.D.		
		<i>Assistant Resident Physicians</i>
		<i>Internes</i>

## SURGERY

EVARTS A. GRAHAM, M.D.	. . . . .	<i>Surgeon-in-Chief</i>
ERNEST SACHS, M.D.	. . . . .	<i>Associate Surgeon</i>
VILRAY P. BLAIR, M.D.		
NATHANIEL ALLISON, M.D.		
MALVERN B. CLOPTON, M.D.		
JOHN R. CAULK, M.D.		
ARTHUR O. FISHER, M.D.		
BARNEY BROOKS, M.D.		
JAMES ARCHER O'REILLY, M.D.		
WARREN R. RAINES, M.D.		
J. E. STEWART, M.D.		
		<i>Assistant Surgeons</i>
		<i>Clinical Assistants</i>

## HOSPITAL STAFF

GLOVER H. COPHER, M.D.	Resident Surgeon
GEORGE BELCHER, M.D.	
EARL PADGETT, M.D.	Assistant Resident Surgeons
GEORGE B. GARRISON, M.D.	
BRANSFORD L. ADELSBERGER, M.D.	
CLIFTON H. BRIGGS, M.D.	
SAMUEL HOUSE, M.D.	
FRANCIS CLEMONT HOWARD, M.D.	Internes
VENCHOW LOH, M.D.	
WALTER SCOTT PRIEST, M.D.	

## OBSTETRICS

HENRY SCHWARZ, M.D.	Obstetrician-in-Chief
HARRY S. CROSSEN, M.D.	Associate Gynecologist
GEORGE GELLMORN, M.D.	
OTTO H. SCHWARZ, M.D.	Assistant Gynecologists
FRED J. TAUSIG, M.D.	
ADOLPH G. SCHLOSSSTEIN, M.D.	Assistant Obstetricians
GRANDISON D. ROYSTON, M.D.	
QUITMAN U. NEWELL, M.D.	Clinical Assistant
OTTO ST. C. KREBS, M.D.	Resident Obstetrician and Gynecologist
CHARLES D. O'KEEFE, M.D.	Assistant Obstetrician and Gynecologist
LUCIUS ROY WILSON, M.D.	
PATRICK HARLAN KENNEDY, M.D.	Internes
MARCUS D. WHITE, M.D.	

## PATHOLOGY

EUGENE L. OPIE, M.D.	Pathologist
L. R. N. WALSH, M.D.	Assistant Pathologist
ALFRED GOLDMAN, M.D.	Resident Pathologist

## SPECIAL DEPARTMENTS

JOSEPH ERLANGER, M.D.	Physiologist
PHILIP A. SHAFFER, PH.D.	Chemist
JOHN B. SHAPLEIGH, M.D.	Otologist
HARRY W. LYMAN, M.D.	Assistant Otologist
I. D. KELLEY, M.D.	Assistant Otologist
ARTHUR E. EWING, M.D.	Ophthalmologist
MEYER WIENER, M.D.	Assistant Ophthalmologist
GREENFIELD SLUDER, M.D.	Laryngologist
W. M. C. BRYAN, M.D.	Assistant Laryngologist

## BARNES HOSPITAL

M. F. ARBUCKLE, M.D.	<i>Assistant Laryngologist</i>
E. R. VAN METER, M.D.	<i>Assistant Laryngologist</i>
MARTIN F. ENGMAN, M.D.	<i>Dermatologist</i>
WM. H. MOOK, M.D.	<i>Assistant Dermatologist</i>
SIDNEY I. SCHWAB, M.D.	<i>Neurologist</i>
LELAND B. ALFORD, M.D.	<i>Assistant Neurologist</i>
JAMES A. BROWN, D.D.S.	<i>Dentist (Surgical Department)</i>
WM. B. SPOTTS, D.D.S.	<i>Dentist (Medical Department)</i>
FRANK H. EWERHARDT, M.D.	<i>Physician in Charge of Hydro- and Physical-Therapeutic Department</i>
R. WALTER MILLS, M.D.	<i>Roentgenologist</i>
SHERWOOD MOORE, M.D.	<i>Roentgenologist in Charge X-Ray Department</i>

## WASHINGTON UNIVERSITY SCHOOL OF NURSING

<i>Service began</i>	<i>Superintendent of Nurses</i>
<i>January 5, 1921</i>	HELEN WOOD, R.N.
	<i>Assistant Superintendent of Nurses</i>
<i>September 3, 1919</i>	HELEN O. POTTER, R.N.
	<i>Instructor</i>
<i>January 15, 1920</i>	SUSIE A. WATSON, R.N.
	<i>Practical Instructor</i>
<i>August 15, 1919</i>	MINNOLA STALLINGS, R.N.
	<i>Assistant Practical Instructor</i>
<i>September 14, 1920</i>	ELEANOR CHASE, R.N.
	<i>Night Supervisor</i>
<i>October 16, 1915</i>	ESTELLE D. CLAIBORNE, R.N.

## ST. LOUIS ASSOCIATION FOR SOCIAL WORK

<i>Service began</i>	<i>Head Worker</i>
<i>September 1, 1918</i>	LOUISE WENZEL

---

	<i>Dietitian</i>
<i>June 30, 1920</i>	SUE COFFIN
	<i>Apothecary</i>
<i>May 7, 1918</i>	C. H. BLOEDLE
	<i>Bookkeeper</i>
<i>October 1, 1918</i>	LEONORE E. LELLEY
	<i>Housekeeper</i>
<i>April 4, 1918</i>	MAE B. SOUTHWICK
	<i>Chief Mechanic</i>
<i>December 1, 1914</i>	LOUIS PLUECK

# Register of Present Members of the Staff

## ABBREVIATIONS

B. H.	Barnes Hospital.
J. H. H.	Johns Hopkins Hospital.
M. G. H.	Massachusetts General Hospital.
P. B. B. H.	Peter Bent Brigham Hospital.
St. L. C. H.	St. Louis Children's Hospital
St. L. City H.	St. Louis City Hospital.
W. U. Disp.	Washington University Dispensary.
W. U.	Washington University.
Harv.	Harvard University.
J. H. M. S.	Johns Hopkins Medical School.
W. U. M. S.	Washington University Medical School.
I.	Interne.
M. I.	Interne on Medical Service.
S. I.	Interne on Surgical Service.
O. & G. I.	Interne on Obstetrical and Gynecological Service.

---

### ADELSBERGER, BRANSFORD L.

M.D., W. U. M. S., 1920; S. I., B. H., 1920-21.

### \*ALFORD, LELAND BARTON

A.B., Univ. of Mo., 1908; M.D., W. U. M. S., 1912. Act. Path. and Research Officer, Monson State Hosp., Palmer, Mass., 1910-11; I., Telfair Hosp., Savannah, 1912. Asst. in Path., 1912-14, and Instr. in Neurol., W. U. M. S., 1914-17. Assoc. in Clin. Neurol., W. U. M. S. Asst. Neurol. to the B. H.; Phys. to W. U. Disp.; Visit. Phys., St. L. City H. and City Sanitar.

### \*ALLISON, NATHANIEL

M.D., Harv., 1901; I., Boston Children's Hosp., 1901-02; Asst., Instr., Clin. Lect. on, Assoc. in and Assoc. Prof. of Clin. Orth. Surg., W. U. M. S., 1904-19; Orth. Surg. to Martha Parsons Free Hosp. for Children, 1903-09. Surg. to St. L. City H., 1910-12. Orth. Surg. to St. Luke's Hosp. Prof. of Clin. Orth. Surg. and Dean, W. U. M. S. Asst. Surg., B. H.; Assoc. Surg. St. L. C. H.; and Chief of the Orth. Clinic, W. U. Disp.

### ARBUCKLE, MILLARD FILLMORE

M.D., W. U. M. S., 1909. Res. Phys., St. L. Mullanphy Hosp., 1909-10. Instr. in Clin. Laryngol. and Rhinol. and Asst. in Clin. Otol., W. U. M. S. Chief of the Laryngol. Clinic, and Surg. to the Otol. Clinic, Asst. Laryngol. to the B. H.

### BAUMGARTEN, WALTER

A.B., J. H. U., 1894; M.D., St. L. Med. Coll., 1896; I., Female Hosp. and St. L. City H., 1896-97. Asst. in Physiol., J. H. M. S., 1897-98; Asst.

## BARNES HOSPITAL

in Med., J. H. M. S., 1902-03; Instr. in Clin. Chem. and Microscopy, W. U. M. S., 1903-08. Member of the Med. Staff, St. L. Maternity Hosp., 1908-13. Member of the Med. Staff, St. Luke's Hosp. Instr. in Clin. Med., W. U. M. S.; Asst. Phys. to the B. H.

### BELCHER, GEORGE WILSON

B.S., W. U., 1917; M.D., W. U. M. S., 1919. S. I., B. H., 1919-20. Asst. Res. Surg., 1920-21.

### \*BLAIR, VILRAY PAPIN

A.M., Christian Bros. Coll., 1890; M.D., St. L. Med. Coll., 1893; I., St. L. Mullanphy Hosp., 1893-95. Instr. in Pract. Anatomy, Assoc. Prof. of Anatomy, and Clin. Prof. of Surg., W. U. M. S., 1894-1912. Visit. Surg. to St. Luke's Hosp. and St. L. Maternity Hosp. Assoc. in Clin. Surg., W. U. M. S., Asst. Surg. to the B. H. and the St. L. C. H.

### BROOKS, BARNEY

B.S., Univ. of Tex., 1905; M.D., J. H. M. S., 1911; Res. H. O., J. H. H., 1911-12. Asst. Instr. and Assoc. in Surg., W. U. M. S., 1912-19. Res. Surg., B. H., 1914-16. Asst. Surg. Jewish Hosp. and St. L. C. H. Assoc. in Clin. Surg., W. U. M. S. Asst. Surg. to B. H., and Surg., W. U. Disp.

### BROWN, JAMES A.

D.D.S., W. U. Dental Sch., 1902. Instr. Gen. Histol., W. U. Dental Sch., 1907-17. Dentist to Dept. of Surg., W. U. Disp. Dentist to B. H.

### BRYAN, WILLIAM MORGAN CASE

A.B., W. U., 1897; M.S., Univ. of Mich., 1898; M.D., J. H. M. S., 1902; I., German Hosp., 1902-04. Instr. Ear, Nose and Throat Diseases, St. L. Univ., 1908-16; Asst. in Clin. Laryngol. and Rhinol., W. U. M. S., 1917-19. Consult. in Oto-Laryngol., Alexian Brothers' Hosp. and St. John's Hosp. Instr. in Clin. Laryngol. and Rhinol., W. U. M. S. Chief of the Laryngol. Clin., W. U. Disp., 1919-20. Laryngol. to B. H.

### BURLINGHAM, LOUIS HERBERT

A.B., Yale Univ., 1902; M.D., J. H. M. S., 1906; I., M. G. H., 1906-07. Asst. Res. Phys. and Asst. Adm., M. G. H., 1907-12; Asst. Supt., P. B. B. H., 1912-17. Lectr. on Hosp. Adm., W. U. M. S. Supt. of the B. H. and Adm. of the St. L. C. H.

### CARTER, WILLIAM S.

M.D., W. U. M. S., 1920. Asst. Supt., B. H., 1920-21.

### CAULK, JOHN ROBERTS

A.B., St. John's Coll., 1901, and A.M., 1912; M.D., J. H. M. S., 1906; I. and Second Asst. Res. Surg., J. H. H., 1908-10. Instr. in G.-U. Surg., W. U. M. S., 1911-17. Asst. Surg. W. U. Disp., 1910-14. G.-U. Surg. to Bethesda Hosp. and St. Luke's Hosp. Ed., Dept. G.-U. Surg., Interstate Med. Jour.; Collaborating Ed., Surg., Gyn. and Ob.; Collaborating Ed., The Am. Jour. of Syphilis. Assoc. in Clin. G.-U. Surg., W. U. M. S., Asst. Surg., B. H., and Chief of the Clin. for G.-U. Surg., W. U. Disp.

### CHESNEY, ALAN MASON

A.B., J. H. U., 1908; M.D., 1912; I. and Asst. Res. Phys., J. H. H., 1912-14; Asst. Res. Phys., Rockefeller Inst. Hosp., N.Y., 1914-17. Asst. in Med., J. H. U., 1913-14. Assoc. in Med., W. U. M. S.; Asst. Phys. to B. H.

## REGISTER OF PRESENT MEMBERS OF THE STAFF

### CLOPTON, MALVERN BRYAN

M.D., Univ. of Va., 1897; I., J. H. H., Baltimore, 1898-99. Instr. in Clin. Surg., W. U. M. S., 1906-10. Chief of Surg. Clinic, O'Fallon Disp., 1907-09. Visit Surg., St. Luke's Hosp., 1900-20; Assoc. Surg., St. L. Mullanphy Hosp., 1907-15. Assoc. in Clin. Surg., W. U. M. S., Assoc. Surg., St. L. C. H., and Asst. Surg. to the B. H.

### COOK, JEROME EPSTEIN

M.D., W. U. M. S., 1905; Asst. Phys., St. L. City H., 1905-06. Prof. of Bact. and Gen. Path., W. U. Dental School; Asst. in Med., W. U. M. S., 1910-14; Assoc. Phys. to the Jewish Hosp. Instr. in Clin. Med., W. U. M. S. Visit. Phys., St. L. City H.; Asst. Phys. to the B. H., and Phys. to W. U. Disp.

### \*COPHER, GLOVER H.

A.B., Univ. of Mo., 1916-; M.D., W. U. M. S., 1918. Asst. Res. Surg., B. H., 1918-20. Asst. in Surg., W. U. M. S., and Res. Surg., B. H.

### \*CROSSEN, HARRY STURGEON

M.D., St. L. Med. Coll., 1892; I., St. L. City H., 1892-95. Supt. and Surg. in Charge, Female Hosp., 1895-99; Chair. of the Gyn. Staff of the St. L. City H., 1910-12; Gyn., St. Luke's Hosp. and Bethesda Hosp. Assoc. in Clin. Gyn., W. U. M. S.; Assoc. Gyn. to the B. H.

### DOCK, GEORGE

M.D., Univ. of Pa., 1884; A.M. (hon.), Harv., 1895; Sc.D. (hon.), Univ. of Pa., 1904; I., St. Mary's Hosp., Philadelphia, 1884-85. Asst. in Clin. Path. and Phys. to Med. Disp., Univ. of Pa., 1887-88; Phys. to John Sealy Hosp., Galveston, 1888-91; Prof. of Path. and Clin. Med., Texas Med. Coll. and Hosp., 1888-91; Phys. to Univ. Hosp., 1891-1908, and Prof. of Med., 1891-1908, Univ. of Mich.; Phys. to Charity Hosp., New Orleans, 1908-10; Prof. of Med., Tulane Univ., 1908-10. Act. Asst. Surg., U. S. A., 1898. Dean, W. U. M. S., 1910-12. Co-ed., Archives of Internal Med. Prof. Med., W. U. M. S.; Consult. Phys., St. L. City H., and Phys. in Chief to the B. H. and W. U. Disp.

### \*ENGMAN, MARTIN FEENEY

M.D., Univ. of N. Y., 1891; I., N. Y. Skin and Cancer Hosp. and Gouverneur Hosp., N. Y., 1891-93. Lect. on Dermatol., N. Y. Post-Grad. Med. Sch., 1894; Lect. on Dermatol., St. L. Univ., 1910-12. Asst. in Skin Dept., Demilt Disp., and Vanderbilt Clinic, N. Y., 1894. Member of the Hosp.; Board, City of St. L., 1912; Pres. of the Med. Board, Barnard Free Skin and Cancer Hosp.; Clin. Prof. of Dermatol. Dermatol. to the B. H. and the St. L. C. H.; Dermatol. in Chief to the W. U. Disp., and Visiting Phys., St. L. City H.

### ERLANGER, JOSEPH

B.S., Univ. of Cal., 1895; M.D., J. H. U., 1899; Res. H. O., J. H. H., 1899-1900. Fellow in Path., Asst., Instr., Assoc., and Assoc. Prof. of Physiol., J. H. U., 1900-06; Prof. of Physiol., Univ. of Wis., 1906-10. Member of the Editorial Committee of the Amer. Jour. of Physiol. Prof. Physiol., W. U. M. S. Chairman, Section N, Division of Med. Sciences, Amer. Assoc. for the Advancement of Science. Member of the Division of Med. Sciences, Natl. Research Council. Physiol. to the B. H.

### EVANS, JAMES A.

M.D., Harv., 1920. M.I., B. H., 1920-21.

## BARNES HOSPITAL

### EWERHARDT, FRANK HENRY

M.D., W. U. M. S., 1909; Asst. in Anatomy, W. U. M. S., 1913-14; Asst. Surg., Orth. Out-Patient Clinic, St. L. C. H., 1912-14. Asst. in Med., W. U. M. S., Surg. to W. U. Disp., and Phys. in Charge of Hydro- and Physical-Therapeutic Dept., B. H.

### EWING, ARTHUR EUGENE

A.B., Dartmouth Coll., 1878; M.D., St. L. Med. Coll., 1883; A.M., W. U., 1912. Clin. Lect. on Ophthalmol., St. L. Med. Coll., 1895. Asst. in the Ophthalmol. Clin. of St. Luke's Hosp., 1888-95. Clin. Prof. of Ophthalmol., W. U. M. S., Ophthalmol. to the St. L. C. H. and to the B. H., and Chief of the Ophthalmol. Clinic, W. U. Disp.

### EYERMANN, CHARLES HERMANN

M.D., St. L. U., 1911; I. and Asst. Res. Phys., 1911-13, and Res. Internist, 1915, St. L. City H. Asst. in Clin. Med., W. U. M. S. Phys. to Med. Students, W. U., and Phys. to W. U. Disp.; Asst. Phys. to B. H.

### FISCHEL, WALTER

A.B., Harv., 1902; M.D., W. U. M. S., 1905; Asst. Phys., St. L. City H., 1905-06. Clin. Asst., 1908-09; Phys. to Out-Patients, 1909-14, W. U. Hosp.; Asst. in Clin. Med., W. U. M. S., 1909-19. Visit. Phys., St. Luke's Hosp. Instr. in Clin. Med., W. U. M. S. Visit. Phys., St. L. City H.; Asst. Phys. to the B. H., and Phys., W. U. Disp.

### FISHER, ARTHUR OSCAR

A.B., Univ. of Wis., 1905; M.D., J. H. M. S., 1909; Res. H. O. and Asst. Res., Surg., J. H. H., 1909-11. Asst. and Instr. in Surg., W. U. M. S., 1911-18. Assoc. in Clin. Surg., W. U. M. S. Asst. Surg. to the B. H. and to the St. L. C. H., and Chief of Surg. Clinic, W. U. Disp.

### \*GARRISON, GEORGE BLAINE

A.B., Univ. of Kans., 1915; M.D., W. U. M. S., 1917. I., Colon Hosp., Canal Zone, 1917-18; Asst. Supt., B. H., 1919-20. Asst. in Surg., W. U. M. S. Asst. Res. Surg., B. H.

### GAY, LEE P.

A.B., Univ. of Mo., 1916; M.D., W. U. M. S., 1918; M. I. B. H., 1919-20. Asst. Res. Med., B. H., 1920-21.

### \*GELLHORN, GEORGE

M.D., Univ. of Wurzburg, 1894. Asst. in Gyn. Mackenrodt Hosp., Berlin, 1895-97; Asst. in Ob., Univ. of Jena, 1898, and Univ. of Vienna, 1899; Instr. and Lect. in Gyn., W. U. M. S., 1904-11. Gyn. to St. Luke's Hosp. and Barnard Free Skin and Cancer Hosp.; Consult. Ob. to St. L. Maternity Hosp.; Consult. Gyn. to St. John's Hosp. Assoc. in Clin. Gyn., W. U. M. S., Asst. Gyn. to the B. H., and Visiting Surg., St. L. City H.

### GOLDMAN, ALFRED

A.B., W. U., 1916; M.D., W. U. M. S., 1920. Res. Path., B. H., 1920-21.

### GRAHAM, EVARTS AMBROSE

A.B., Princeton Univ., 1904; M.D., Rush Med. Coll., 1907; I., Presbyterian Hosp., Chicago, 1907-08; Fellow in Path., Rush Med. Coll., 1906-07; Fellow, Asst., and Instr. in Surg., Rush Med. Coll., 1908-19; Member of Staff of O. S. A. Sprague Memorial Inst. for Clin. Research, Chicago, 1912-15. Co-ed. of Archives of Surg. Major, M. C. U. S. Army; Mem-

## REGISTER OF PRESENT MEMBERS OF THE STAFF

ber of Empyema Commission; Commanding Officer, Evacuation Hosp., 34, France. Prof. of Surg., W. U. M. S. Surg.-in-Chief to the B. H., the St. L. C. H., and the W. U. Disp., and Consult. Surg., St. L. City H.

### \*HARDY, WILLIAM FREDERIC

M.D., W. U. M. S., 1901; I., St. L. City Hosp., 1901-02. Asst. and Instr. in Clin. Ophthalmol., W. U. M. S., 1917-20. Assoc. in Clin. Ophthalmol., W. U. M. S. Asst. Ophthalmol. to the B. H.; Surg. to W. U. Disp., and Visit. Surg. to the St. L. City H.

### HERRMANN, GEORGE R.

B.S., Univ. of Mich., 1916; M.S., Univ. of Mich., 1918; M. D., Univ. of Mich., 1918. Asst. Res. Phys., B. H., 1919-20. Res. Phys., B. H., 1920-21.

### HOUSE, SAMUEL JOHN

M.D., Rush Med. Coll., 1920; S.I., B. H., 1920-21.

### HOWARD, FRANCIS CLEMONT

A.B., Univ. of Mo., 1915; M.D., W. U. M. S., 1919. H. O., Bayview City Hosp., Baltimore Md., and Bellevue Hosp., N. Y., 1919-20. S. I., B. H., 1920-21.

### \*JONES, ANDREW B.

M.D., Vanderbilt Univ., 1916; M.I., B. H., 1919-20. Asst. Res., Med. B. H., 1920-21.

### \*JOSTES, FRED B.

M.D., W. U. M. S., 1920. M.I., B. H., 1920-21.

### \*KELLEY, ISAAC DEE, JR.

B.S., St. L. U., 1913; and M.D., 1908; I., St. L. City H., 1908-09. Asst. and Instr. in Ear, Nose and Throat Diseases, St. L. U., 1909-19; Asst. in Clin. Otol., W. U. M. S., 1919-20. Consult. Oto.-Laryngol., St. L. City H., 1913-14; Oto.-Laryngol., St. Mary's Infirmary, 1913-20. Instr. in Clin. Otol., W. U. M. S. Asst. Otol. to the B. H., and Surg. to W. U. Disp.

### KENNEDY, PATRICK H.

B.S., W. U., 1918; M.D., W. U. M. S., 1920. O. and G. I., B. H., 1920-21.

### KREBS, OTTO ST. CLAIR

B.S., W. U., 1917; M.D., W. U. M. S., 1919. O. and G. I., B. H., 1918-19; Asst. Res. O. and G., 1919-20; Asst. in Clin. Ob., W. U. M. S. Res. O. and G., 1920-21.

### \*KUDNER, DONALD F.

M.D., Univ. of Mich., 1920. M. I., B. H., 1920-21.

### LOH, VENCHOW

M.D., H. M. S., 1920. S. I., B. H., 1920-21.

### LUTEN, DREW W.

A.B., State Univ. of Ky., 1901; M.D., J. H. U., 1911; I., St. Francis Hosp., Pittsburgh, 1911-12; Asst. in Med., W. U. M. S., 1915-17; Asst. Res. Phys. and Res. Phys., B. H., 1914-17. Instr. in Clin. Med., W. U. M. S. Visit. Phys., St. L. City H., and Asst. Phys. to the B. H.

## BARNES HOSPITAL

### LYMAN, HARRY WEBSTER

M.D., St. L. Coll. of Phys. and Surg., 1895; I., St. L. Woman's Hosp., 1895-96; Clin. Clerk, London Hosp., 1900. Asst., St. L. Coll. of Phys. and Surg., 1895-96; Consult. Otol., Rhinol. and Laryngol., St. L. City H., 1905-10. Demonstrator and Prof. of Anatomy, St. L. Coll. of Phys. and Surg., 1900-07; Asst. in Otol., W. U. M. S., 1914-16. Instr. in Clin. Otol., W. U. M. S., 1916-19; Visiting Consult. in Diseases of the Ear, Nose and Throat, U. S. Public Health Serv. Hosp. No. 35; Assoc. in Clin. Otol., W. U. M. S.; Assoc. Otol. to the St. L. C. H. and B. H., and Surg., W. U. Disp.

### \*MILLS, RALPH WALTER

B.S., Univ. of Ill., 1899; M.D., Marion Sims Med. Coll., 1902; I., Alexian Bros. Hosp., St. L. 1902-03. Asst. in Path., 1904-05, and Instr. in Dietetics. 1908-14, W. U. M. S. Assoc. in Clin. Med., W. U. M. S. Asst. Phys. and Roentgenol. to the B. H., and Gastro-Enterol. to W. U. Disp.

### \*MOOK, WILLIAM HEWSON

M.D., Beaumont Med. Coll., 1900; I., St. L. City H., 1900-01, and N. Y. Skin and Cancer Hosp., 1903-05. Assoc. Prof. of Dermatol., St. L. Univ., 1910-12. Visit. Dermatol., St. L. City H., 1910-12, 1914-20; Attend. Phys., Barnard Free Skin and Cancer Hosp.; Dermatol., Mo. Pacific Railway Hosp. Instr. in Clin. Dermatol., W. U. M. S. Asst. Dermatol. to the B. H. and the St. L. C. H., and Chief of the Dermatol. Clinic, W. U. Disp.

### MOORE, SHERWOOD

M.D., W. U. M. S., 1905; I., St. L. City H., 1905-06; Res., W. U. Hosp., 1906-07; Instr. in Ob., W. U. M. S., 1907-09. Asst. in Surg., St. L. C. H., 1910-13; House Phys., M. G. H., X-ray Dept., 1916-17. Assoc. in Surg. (Radiology), W. U. M. S. Roentgenol. in Charge of the Actinographic Lab., B. H.

### NEWELL, QUITMAN UNDERWOOD

M.D., Univ. of Ala. Med. Sch., 1911; I., So. Infir., Mobile, 1911; H. O., 1911-12, and Res. Ob. and Gyn., 1912-14, W. U. Hosp.; Ob. St. L. Maternity Hosp. Asst. in Clin. Ob., W. U. M. S. Surg. to W. U. Disp. Asst. Ob. and Gyn., B. H.

### \*OCHSNER, EDWARD WILLIAM

M.D., W. U. M. S., 1920. M. I., B. H., 1920-21.

### \*O'KEEFE, CHARLES DARREL

A.B., Univ. of Mo., 1916; M.D., W. U. M. S., 1918. O. and G. I., B. H. Sept., 1919-20. Asst. Res. O. and G., B. H., 1920-21.

### OLMSTED, WILLIAM HARWOOD

B.S., Coe Coll., 1909; M.D., J. H. U., 1913; I., W. U. Hosp., 1913-14. Asst. Res. Phys., B. H., 1914-17. Assoc. in Clin. Med., W. U. M. S. Asst. Phys. to B. H., and Phys. to W. U. Disp.

### OPIE, EUGENE LINDSAY

A.B., J. H. U., 1893, and M.D., 1897; Res. H. O., J. H. H., 1897-98, and Asst. Res. Path., 1900-02. Fellow, Asst. Instr., and Assoc. in Path., J. H. M. S., 1897-1904; Assoc. and Member of the Rockefeller Inst. for Med. Research, N. Y., 1904-10; Path. to the Presby. H. of N. Y., 1907-10. Dean, W. U. M. S., 1912-15. Prof. of Path., W. U. M. S. Path. to the B. H., and the St. L. C. H.

## REGISTER OF PRESENT MEMBERS OF THE STAFF

### O'REILLY, JAMES ARCHER

A.B., Harv., 1902, and M.D., 1906; I., Carney Hosp., Boston, 1906-07. Asst. in Othr. Clinic, Children's Hosp., Boston; Instr. in Orth. Surg., St. L. Univ. Med. Sch., 1907-11. Orth. Surg. to St. John's Hosp., Rebekah Hosp., and Mt. St. Rose Hosp. Assoc. in Clin. Orth., W. U. M. S. Visit. Surg., St. L. City H., Asst. Surg. to the St. L. C. H., and the B. H., and Surg., W. U. Disp.

### \*PADGETT, EARL CALVIN

B.S., Univ. of Kans., 1916; M.D., W. U. M. S., 1918. I., B. H., 1919-20. Asst. in Surg., W. U. M. S., and Asst. Res. Surg., B. H.

### PRIEST, WALTER SCOTT, JR.

A.B., Univ. of Kans., 1917; M.D., W. U. M. S., 1920. S. I., B. H., 1920-21.

### \*RAINEY, WARREN ROBERT

M.D., Northwestern Univ. Med. Sch., 1910. I. and Res., Mercy Hosp., Chicago, 1910-13. Instr. in Clin. Surg., W. U. M. S. Clin. Asst. to the B. H. and the St. L. C. H., Surg. to W. U. Disp., and Visit. Surg., St. L. City H.

### ROYSTON, GRANDISON DELANEY

M.D., W. U. M. S., 1907; Junior and Senior Ob. Res., W. U. Hosp., 1907-09. Asst. in Ob., W. U. M. S., 1913-15. Asst. Supt., St. L. Female Hosp., 1910; Member of Med. Staff, St. L. Maternity Hosp. Instr. in Clin. Ob., W. U. M. S. Asst. Ob. to the B. H. and Chief of the Ob. and Gyn. Clinic, W. U. Disp.

### \*RUDOLPH, ROYAL WILLIAM

B.S., Univ. of S. Dak., 1918; M.D., W. U. M. S., 1920. M. I., B. H., 1920-21.

### SACHS, ERNEST

A.B., Harv., 1900; M.D., J. H. U., 1904; I., Mt. Sinai Hosp., N. Y., 1904-07; Clin. Clerk, Natl. Hosp., London, 1908. Attending Neurol. Surg. to Montefiore Home and Beth Israel Hosp., and Adjunct Asst. Attend. Surg. to Bellevue Hosp., N. Y., 1909-11. Assoc. in and Assoc. Prof. of Surg., W. U. M. S., 1911-19. Assoc. Surg. in charge of Neurol. Surg., Jewish Hosp. Surg. to W. U. Disp.; Consult. Surg., St. L. City Sanatar.; Prof. of Clin. Neurol., W. U. M. S.; Assoc. Surg. to the B. H. and the St. L. C. H.

### SCHLOSSSTEIN, ADOLPH GEORGE

M.D., St. L. Med. Coll., 1894; I., St. L. City H. and Female Hosp., and Phys. to City Disp., 1894-96; I., Frauenklinik, 1897. Clin. Asst. Instr. and Lect., W. U. M. S., 1899-1912. Asst. in Clin. Ob., W. U. M. S. Asst. Ob. to the B. H., and Surg., W. U. Disp.

### \*SCHWAB, SIDNEY ISAAC

M.D., Harv., 1896. Prof. of Nervous and Mental Diseases, St. L. Univ., 1904-12; Non-Res. Lect. on Nervous and Mental Diseases, Univ. of Mo. Sch. of Med., 1909-10; Assoc. in Neurol. and Assoc. Prof. of Clin. Neurol., W. U. M. S., 1913-19. Visiting Neurol. to the St. L. City H. and Sanatar., 1909-13; Neurol. to the Jewish Hosp. Prof. of Clin. Neurol., W. U. M. S. Consult. Phys., St. L. City H. and City Sanitar.; Neurol. to the B. H. and the St. L. C. H.; and Chief of the Neurolog. Clinic, W. U. Disp.

## BARNES HOSPITAL

### \*SCHWARZ, HENRY

M.D., St. L. Med. Coll., 1879, and Univ. of Giessen, 1880; Res. Phys., Recurrent Fever Hosp., Giessen, 1879-80; Asst. Phys. and Tutor, Dept. of Ob., Univ. of Giessen, 1880-81, and Univ. of Heidelberg, 1881-83. Clin. Lect. on Gyn., 1886-89, and Clin. Prof. of Gyn., 1889-99, St. L. Med. Coll.; Prof. of Ob., 1899-1908, and Prof. of Ob. and Gyn., 1908-12, W. U. M. S. Clin. Prof. of Ob., Ob. in Chief to the B. H., and the W. U. Disp., and Consul. Surg., St. L. City H.

### SCHWARZ, OTTO HENRY

M.D., W. U. M. S., 1913; I., St. L. C. H., 1913, and W. U. Hosp., 1914; Res. Ob., B. H., 1914-15. Asst. in Clin. Ob., W. U. M. S. Asst. Gyn. to the B. H., and Surg. to W. U. Disp.

### \*SHAFFER, PHILIP ANDERSON

A.B., W. Va. Univ., 1900; Ph.D., Harv., 1904. Res. Asst. Path. Chem., McLean Hosp., Waverley, Mass., 1900-03; Asst., Fellow, and Instr. in Chem. Path., Cornell Univ., 1904-10; Chem. to Huntington Fund for Cancer Research, 1906-10; Path. Chem. and Head of Chem. Section of the Lab. of Bellevue Hosp., 1909-10. Dean, W. U. M. S., 1915-19. Prof. of Biol. Chem., W. U. M. S., Chem. to the B. H.

### SHAPLEIGH, JOHN BLASDEL

A.B., W. U., 1878; M.D., St. Louis Med. Coll., 1881; I., St. L. City H. 1881-82; I., Female Hosp., 1882-83. Lectr. on Diseases of the Ear, 1886-90, and Clin. Prof. Diseases of the Ear, 1890-95, St. L. Med. Coll.; Dean of the Med. Faculty, Med. Dept. of W. U., 1901-02; Prof. of Otol., St. L. Med. Coll.; and W. U. M. S., 1895-1912. Member of the Hosp. Board of the City of St. Louis, 1910-12; Member of the Med. Staff of St. Luke's Hosp. and Barnard Free Skin and Cancer Hosp. Clin. Prof. of Otol., W. U. M. S. Otol. to the St. L. C. H., the B. H., and the W. U. Disp.

### \*SLUDER, GREENFIELD

M.D., St. L. Med. Coll., 1888; I., St. L. City H., 1888-92. Instr. in Urinol. and in Clin. Med., 1891-98, and Lectr. on Laryngol., St. L. Med. Coll., 1898-99, and Med. Dept. of W. U., 1899-1905. Member of Staff of St. Luke's Hosp. and Barnard Free Skin and Cancer Hosp. Clin. Prof. of Laryngol. and Rhinol., W. U. M. S. Laryng. to the B. H., the St. L. C. H., and the W. U. Disp.

### SMITH, ELSWORTH STRIKER

A.B., St. L. Univ., 1884, and A.M., 1888; M.D., St. L. Med. Coll., 1887; I., Asst. Phys. and Asst. Supt., St. L. City H., 1887-90. Demonstrator in Anatomy, Instr. in Phys. Diag. and Asst. Phys. to the Med. Clinic, St. L. Med. Coll., 1890-99. Phys., St. Luke's Hosp., Consult. Phys., St. John's Hosp., Jewish Hosp., Barnard Free Skin and Cancer Hosp., Frisco Hosp., and St. L. Maternity Hosp. Clin. Prof. of Med., W. U. M. S. Asst. Phys. to the B. H.

### \*SPOTTS, WILLIAM B.

D.D.S., W. U. Dental Sch., 1917. Dentist to Dept. of Int. Med., W. U. Disp. Dentist to B. H.

### STEWART, JOSEPH EDGAR

M.D., Univ. of Pa., 1914. S. I., B. H., 1914-15. Surg. to W. U. Disp., 1915-20. Asst. in Clin. Orth. Surg., W. U. M. S. Surg., W. U. Disp. Asst. Clin. Orth. Surg., B. H.

## REGISTER OF PRESENT MEMBERS OF THE STAFF

### TAUSSIG, ALBERT ERNEST

A.B., Harv., 1891; M.D., St. L. Med. Coll., 1894; I., St. L. City H., 1894-95. Prof. of Physiol., 1909, Clin. Prof. of Med., 1910-12, and Assoc. in Med., 1912-14, W. U. M. S. Phys. to the Jewish Hosp. Assoc. Prof. of Clin. Med., W. U. M. S. Asst. Phys. to the B. H.

### TAUSSIG, FREDERICK JOSEPH

A.B., Harv., 1893; M.D., St. L. Med. Coll., 1898; I. and Asst. Supt., Female Hosp., St. L., 1898-1901. Instr. and Lect. in Gyn., W. U. M. S., 1906-09. Clin. Asst., 1906-08, Surg. to Out-Patients, 1909-11, and Chief of Gyn. Out-Patient Clinic, 1912-14, W. U. Hosp.; Gyn., Barnard Free Skin and Cancer Hosp.; Ob., St. L. Maternity Hosp.; Consult. Gyn., St. John's Hosp. Assoc. in Clin. Gyn., W. U. M. S. Visit. Surg., St. L. City H., and Asst. Gyn. to the B. H.

### \*TERRILL, E. H.

M.D., W. U. M. S., 1918. H. O., Bayview City Hosp., Baltimore, 1918-20. Asst. Res. Med., B. H., 1920-21.

### VAN METER, EUGENE ROBERT

M.D., W. U. M. S., 1905. Asst. in Clin. Laryngol. and Rhinol., W. U. M. S. Surg., W. U. Disp. Asst. Laryngol. to B. H.

### \*WALSH, L. S. NEWMAN

D.V.M., Kansas City Veterinary Coll., 1912; M.D., St. L. Univ., 1916. Asst. in Compar. Path., W. U. M. S., 1916-17; Res. Path., B. H., and Asst. Path. to the St. L. C. H., 1918-19. Asst. in Path., W. U. M. S. Asst. Path to the B. H.

### \*WIENER, MEYER

M.D., Mo. Med. Coll., 1896; I., St. L. City H., 1896-97. Member of Staff and Chief of Eye Clinic, Jewish Hosp.; Member of Staff of Bethesda Hosp., St. Vincent's Asylum, and St. L. Maternity Hosp. Assoc. in Clin. Ophthalmol., W. U. M. S. Asst. Ophthalmol. to the B. H., Surg. to the W. U. Disp., and Visit. Surg. to St. L. City H.

### WHITE, MARCUS D.

M.D., W. U. M. S., 1920. O. and G. I., B. H., July, 1920.

### WILSON, LUCIUS ROY

A.B., Univ. of Mo., 1918; M.D., W. U. M. S., 1920. O. and G. I., B. H., 1920-21.

---

\* Record possibly incomplete; no reply received.

# Register of Former Members of the Staff

## \*ABBOTT, FREDERICK BOOK

M.D., W. U. M. S., 1914. I., W. U. Hosp., 1914-15; Asst. Res. Surg., B. H., 1916-17. Asst. in Clin. Surg., W. U. M. S., 1917-19. Asst. Surg. to W. U. Disp.

## \*ABRAMS, SAMUEL FRANK

M.D., W. U. M. S., 1917. Asst. Res. Ob. and Gyn., B. H., 1917-18.

## \*ALLEN, CHARLES CURTIS

M.D., W. U. M. S., 1915. Asst. Res. Ob. and Gyn., B. H., 1916-17.

## \*ALSUP, FREDERICK F.

M.D., W. U. M. S., 1915. S. I., B. H., 1915, to January, 1916.

## \*ANDERSEN, HANS

M.D., W. U. M. S., 1919. Act. Res. Path., B. H., 1918-19.

## ANDREWS, RALEIGH K.

B.S., Univ. of Nebr., 1915; M.D., W. U. M. S., 1916. I., St. L. C. H., 1916-17. Asst. Res. Phys., B. H., 1917-18. Asst. Res. and Res. Phys., B. H., 1917-19. Asst. in Med., W. U. M. S. Phys. to W. U. Disp.

## \*BARNES, FRANCIS MERRIMAN, JR.

A.B., Hamilton Coll., 1903, and A.M., 1906; M.D., J. H. M. S., 1907. I., Sheppard and Enoch Pratt Hosp. for Nervous and Mental Diseases, 1907. Instr. in Neurol. and Psychiatry, George Washington Univ., 1911-13; Asst. Prof. of Nervous and Mental Diseases, St. L. U., 1913-14. Asst. Phys. and Director of Clin. Lab., Sheppard and Enoch Pratt Hosp., 1907-10; I., Junior Asst., Asst. Phys., Senior Asst. Phys., and Clin. Director, 1910-13, Gov. Hosp. for the Insane, Washington, D. C.; Neurol., St. Mary's Hosp., St. Louis, 1913; Med. Director, Glenwood Sanatorium, 1916. Assoc. in Clin. Psychiatry, W. U. M. S. Act. Phys. in Psychiatry to B. H., 1918-19. Visit. Phys., St. L. City H., Consult. Phys., City Sanitar., and Phys., W. U. Disp.

## \*BARNETT, THEODORE SWIFT

B.S., Univ. of Mich., 1916; M.D., Univ. of Mich. Med. Sch., 1918. M. I., B. H., 1918-19. Asst. Res. Surg. (Neurol. Service), B. H., 1919-20.

## \*BAUR, CHAS. E.

Supt., B. H., 1915-17. Supt. City Infirmary, St. Louis, Mo.

## \*BEAN, LEO CHAPMAN

Ph.B., Ohio Univ., 1911; M.D., J. H. M. S., 1915. I., Union Protestant Infirmary, Baltimore, 1915-16; Asst. Res. Phys., Bayview Hosp., Baltimore, 1916-17. Asst. in Path., W. U. M. S., 1917-18. Instr. in Med., W. U. M. S.; Phys. to Med. Students, W. U.; and Phys., W. U. Disp., 1917-18. Asst. Path. to B. H., 1918.

## REGISTER OF FORMER MEMBERS OF THE STAFF

### \*BECHTOLD, EDMOND

M.D., W. U. M. S., 1915. S. I., B. H., 1915-16. Asst. Res. Surg., B. H., 1916-18.

### \*BELL, HOWARD HOMER

M.D., Univ. of Pa., 1912. I., Harrisburg Gen. Hosp., 1912-13. Asst. in Path. and Bacteriol., Univ. of Alabama Sch. of Med., 1913-14; Asst. in Path., W. U. M. S., 1914-16. Instr. in Path., W. U. M. S. Asst. Path. to the B. H.

### \*BOND, HARRY WILLIAM

B.S., Univ. of Wis., 1917; M.D., W. U. M. S., 1919. S. I., B. H., 1919-20.

### \*BREDECK, JOSEPH FRANCIS

M.D., W. U. M. S., 1914. Asst. Res. Med., B. H., 1915-16.

### \*BRIGGS, CLIFTON H.

M.D., W. U. M. S., 1920. S. I., B. H., 1920-21.

### \*BROWN, WILBUR KENNETH

A.B., Shurtleff Coll., 1913; M.D., W. U. M. S., 1917. M. I., B. H., 1917-18.

### \*BUNDY, HARRY EUGENE

M.D., W. U. M. S., 1916. M. I., B. H., 1916-17.

### BURROWS, MONTROSE T.

A.B., Univ. of Kans., 1905. M.D., J. H. M. S., 1909. Act. Path., B. H., April 3, 1918, to July, 1920. Assoc. Prof. Exper. Surg., W. U. M. S.

### CAFFEY, JOHN P.

A.B., Univ. of Mich., 1916; M.D., Univ. of Mich., 1919. M. I., B. H., July, 1919-. Resigned March 6, 1920.

### \*COLE, HERMAN R.

M.I., B. H., 1917.

### CRESSWELL, GEORGE FRANCIS

A.B., Univ. of Mo., 1916; M.D., W. U. M. S., 1918. O. and G. I., B. H., July, 1918, to October, 1918. Asst. Res. O. and G., B. H., October, 1918, to February 16, 1918.

### \*DALLWIG, EUGENE LEON

M.D., W. U. M. S., 1916. O. and G. I., B. H., 1916-17.

### \*DARROW, FRANK I.

M.D., J. H. M. S., 1913. Res. Path., B. H., 1917.

### \*DAY, ANTHONY B.

B.S., Harv., 1913; M.D., W. U. M. S., 1919. M. I., B. H., 1919-20.

### \*DEAN, JAMES R.

M.D., W. U. M. S., 1918. M. I., B. H., 1918. Asst. Res. Med., B. H., November, 1918, to May, 1919.

### \*DENISON, WALCOTT

M.D., W. U. M. S., 1914. S. I., B. H., 1914-15.

## BARNES HOSPITAL

### \*DIXON, ELLIOTT KNIGHT

M.D., W. U. M. S., 1915. S. I., B. H., 1915-16. Asst. Res. Surg., B. H., 1916.

### \*DORRIS, RICHARD P.

A.B., Univ. of Mo., 1915; M.D., W. U. M. S., 1917. S. I., B. H., 1917-18.

### \*EBERBACK, CARL WALTER

M.D., Univ. of Mich. Med. Sch., 1916. M. I., B. H., 1916-17. Asst. Res. Med., B. H., 1917.

### ELMENDORF, JOHN EDWARD

A.B., Rutgers Coll., 1914; M.D., J. H. M. S., 1918. I., Med. Serv., J. H. H., 1918-19. Asst. Res. Med., B. H., 1919-20.

### \*FLEXNER, MORRIS

M.D., J. H. M. S., 1914. Asst. Res. Med., B. H., July, 1915, to January, 1916.

### \*FREEMAN, MERVIN

M. I., B. H., 1918.

### \*FUSON, LEVI HARRISON

M.D., W. U. M. S., 1915. M. I., B. H., 1915-16.

### \*GILBERT, ALLAN ARTHUR

M.D., W. U. M. S., 1914. M. I., B. H., 1914-15. Asst. Res. Med., B. H., 1915-16.

### \*GILLES, CLIFFORD LAWRENCE

A.B., Univ. of Kans., 1917; M.D., W. U. M. S., 1919. S. I., B. H., 1919-20.

### GILLILAND, CHARLES EDWARD

B.S., Univ. of Tex., 1917; M.D., Univ. of Kans., 1911. Asst. Res. Med., B. H., 1917-18. Res. Med., B. H., 1918. Resigned May 1, 1919.

### GREDITZER, HARRY GUS

M.D., W. U. M. S., 1912. I., W. U. Hosp. 1912-13. Asst. Surg., W. U. Disp., 1913-17. Clin. Asst. in G.-U. Surg., B. H., June, 1920, to Oct., 1920. Asst. in Surg., W. U. M. S., and Surg. to W. U. Disp.

### \*GREEN, JOHN, JR.

A.B., Harv., 1894; M.D., Med. Dept. of W. U., 1898. Asst. Res. Phys., St. L. City H., 1898-99. Consult. Ophthalmic Surg., Female Hosp., 1904-06. Ophthalmic Surg., Social Serv. Hosp., 1908-11; St. L. City H., 1910-12, and St. L. Eye, Ear, Nose and Throat Infirmary, 1912-16. Consult. Ophthalmic Surg., St. Louis Maternity Hosp. Ed., Dept. of Ophthal., Interstate Med. Jour. Asst. in Ophthal., W. U. M. S.; Asst. Ophthalmic Surg., B. H., and Surg. to W. U. Disp., 1916-18.

### \*GUNDELACH, CHARLES ARMIN

M.D., W. U. M. S., 1908. I., St. L. City H., 1908-09. Asst. in Laryngol. and Rhinol., W. U. M. S., 1915. Instr. in Clin. Laryngol. and Rhinol., W. U. M. S. Consult. Surg., St. L. City H., and Surg., W. U. Disp. Asst. Laryngol. to B. H., 1917-20.

### \*HAGEN, H. H.

Asst. Res. Surg., B. H., 1915-16.

## REGISTER OF FORMER MEMBERS OF THE STAFF

\*HALEY, ROY ROBERT

M.D., W. U. M. S., 1916. S. I., B. H., 1916-17.

\*HARVEY, GEORGE GIVINS

A.B., Univ. of Mo., 1916; A.M., Univ. of Mo., 1917; M.D., J. H. M. S., 1919. O. and G. I., B. H., 1919-20.

\*HEALEY, ROSCOE H.

M.D., W. U. M. S., 1918. O. and G. I., B. H., July to December, 1918. (Deceased.)

\*HODGES, FRED JENNER

B.S., Univ. of Wis., 1917. M.D., W. U. M. S., 1919. Res. Path., B. H.. 1919-20.

\*JUDY, JOHN ABRAHAM

M.D., W. U. M. S., 1915. Asst. Res. O. and G., B. H., 1916-17.

\*KILIAN, LEO JULIUS

M.D., W. U. M. S., 1913. Asst. Res. Med., B. H., 1915.

\*KOETTER, ALBERT FREDERICK

M.D., Mo. Med. Coll., 1892. I., Frauen. Hosp. Dresden, 1894. Asst. and Instr. in Otol., W. U. M. S., 1910-16. Member of Staff, Deaconess Hosp. Assoc. in Clin. Otol., W. U. M. S. Asst. Otolog. to the B. H. and the St. L. C. H., and Chief of the Otolog. Clinic, W. U. Disp., 1916-20. (Deceased.)

LEHMAN, EDWIN PARTRIDGE

A.B., Williams Coll., 1910; M.D., Harv., 1914. I., P. B. B. H., Boston, 1914-15. Asst. Res. Surg., B. H., 1915-16; Asst. in Surg., W. U. M. S., 1916-20. Instr. in Clin. Surg., W. U. M. S., 1919-20. Res. Surg. to the B. H., 1919-20. Instr. in Surg., 1920-21. Surg., W. U. Disp. Visit. Surg., St. L. City H.

LILJIDAHL, ELMER NATHANIEL

A.B., Univ. of I., 1915; M.D., W. U. M. S., 1918. M. I., B. H., July, 1918, to November, 1918. Asst. Res. Med., B. H., November, 1918-19.

LUEKING, FREMONT

B.S., W. U., 1916; M.D., W. U. M. S., 1918. S. I., B. H., July, 1919. Resigned March 1, 1920.

\*MAHONY, FRANCIS JOSEPH

M.D., St. Louis Univ. Med. Sch., 1918. S. I., B. H., 1918-19.

\*MEYER, JEROME

M.D., J. H. M. S., 1914. M. I., B. H., 1914-15.

\*MEYERS, G. M.

S. I., B. H., July, 1917, to October, 1917.

\*MITCHEL, WILLIAM FRANCIS

M.D., Syracuse Univ. Coll. of Med., 1916. S. I., B. H., 1916-17.

\*MITCHELL, W. LELAND

M.D., W. U. M. S., 1918. S. I., B. H., 1919-20.

## BARNES HOSPITAL

### \*MURPHY, FRED TOWSLEY

A.B., Yale Univ., 1897, and A.M. (hon.), 1914; M.D., Harv., 1901. I. and Grad. Asst., M. G. H., 1901-02. Asst. in Anatomy and Austin Teaching Fellow in Surg., 1903-05, and Asst. in Surg., 1910-11, Harv. Med. Sch. Asst. Surg., Infants' Hosp., Boston, 1904-08; Surg. to Out-Patients, M. G. H., 1907-11; Visit. Surg. to Clinic, H. M. S., 1909-11. Prof. of Surg., W. U. M. S. Consult. Surg., St. L. City H., Surg. in Chief to the B. H. and the St. L. C. H., 1915-19.

### \*McCULLOCH, HUGH

A.B., Univ. of Ark., 1908; M.D., J. H. M. S., 1912. Res. H. O., W. U. Hosp., 1912-13; Res. Phys., W. U. and B. H., 1912-15. Asst. in Med., 1913-15, and Asst. in Ped., 1915-16, W. U. M. S. Instr. in Clin. Ped., W. U. M. S. Asst. Phys., St. L. C. H., and Phys. to W. U. Disp.

### McNALLEY, FRANK POWELL

B.S., W. U., 1915, and M.D., 1917. O. and G. I., B. H., 1917-19. Res. O. & G., B. H., 1917-18. Asst. in Clin. Ob., W. U. M. S.

### \*NESBIT, WELLWOOD MACK

A.B., Univ. of Iowa, 1913; M.D., Rush Med. Sch., 1917. M. I., B. H., February, 1918, to June, 1918.

### \*NOURSE, JOHN DARLINGTON

M.D., West Reserve Univ. Sch. of Med., 1916. M. I., B. H., 1916.

### \*O'DONNELL, HENRY ST. CLAIR

A.B., Univ. of Kans., 1915. M.D., W. U. M. S., 1917. M. I., B. H., 1917-18.

### \*PEACOCK, KENNETH C.

A.B., Univ. of Wis., 1915. M.D., W. U. M. S., 1917. M. I., B. H., 1917-18.

### POLK, GEORGE M.

A.B., Coll. of Emporia, 1913; M.D., W. U. M. S., 1918. M. I., B. H., 1919-20.

### \*REDDINGTON, JAMES CRESCENT

M.D., St. L. Univ. Med. Sch., 1915. Asst. Res., B. H., 1916-17.

### \*REDFERN, THOMAS CRAIG

B.S., Clemson Coll., S. C., 1912; M.D., Long Island Coll. Hosp., 1916. Res. Med., B. H., 1919-20.

### \*RICE, FLOYD C.

O. and G. I., B. H., 1916-17. Asst. Res. O. and G., 1917.

### \*ROBINSON, GEORGE CANBY

A.B., J. H. U., 1899, and M.D., 1903. Asst. Demonstrator of Anatomy, Cornell Univ., 1903-04; Res. Path. and Res. Phys., Pa. Hosp., 1904-08; Director of the Path. Lab., Presby. Hosp., Philadelphia, 1909-10; Res. Phys. and Assoc. in Med., Hosp. of the Rockefeller Inst., 1910-13; Acting Dean of the Med. Faculty, 1917-18. Assoc. Prof. of Med. and Dean, W. U. M. S., 1918-20. Assoc. Phys. to the B. H., and Chief of the Med. Clinic, W. U. Disp., 1918-20.

### \*ROSE, DALTON KEATS

M.D., W. U. M. S., 1915. M. I., B. H., 1915-16. S. I., B. H., 1916-17. Asst. Res. Surg., B. H., 1917-18.

## REGISTER OF FORMER MEMBERS OF THE STAFF

### \*SAGE, EARL CUDDINGTON

M.D., W. U. M. S., 1916. O. and G. I., B. H., 1916-17. Asst. Res. O. and G., B. H., 1917-18.

### \*SAUER, WILLIAM EMIL

M.D., Med. Dept. of W. U., 1896. I., St. L. City H. and Female Hosp., 1896-97. Clin. Instr. in Laryngol., W. U. M. S., 1906-11. Asst. Phys., St. L. Insane Asylum, 1897-98; Clin. Asst., Surg. to Out-Patients and Chief of Laryngol., Out-Patients' Clinic, 1907-14; W. U. Hosp.; Otolog. and Laryngolog. to St. L. Mullanphy Hosp. and Bethesda Hosp.; Laryngol. to St. L. Maternity Hosp. Instr. in Clin. Laryngol., W. U. M. S. Visit. Surg., St. L. City H., and Asst. Laryngol. to the B. H.

### \*SCHMAN, EDWIN PARTRIDGE

A.B., Williams Coll., 1910; M.D., Harv., 1914. Asst. Res. Surg., B. H., 1915-16. Asst. in Surg., W. U. M. S., 1916-17.

### \*SCHMIDT, ERWIN RUDOLPH

M.D., W. U. M. S., 1916. M. I., B. H., 1916-17.

### SCHUSSLER, HERMANN, JR.

B.S., Univ. of Cal., 1914; M.D., H. M. S., 1918. I., Rotating Service, San Francisco Hosp. Senior I. Med., Lane Hosp., San Francisco. Asst. Res. Med., B. H., August 1, 1920. Resigned November 6, 1920.

### \*SEVIN, OMAR RICHARD

M.D., W. U. M. S., 1913. I., W. U. Hosp. and B. H., 1913-15. Asst. in Surg., W. U. M. S., 1915-16.

### \*SMITH, DAVID ENGLISH

M.D., W. U. M. S., 1914. Res. O. and G., B. H., 1915-16.

### \*SMITH, L. C.

Business Manager, B. H., 1915-17. (Deceased.)

### \*STALEY, FOREST HENRY

A.B., Univ. of Wis., 1909; M.D., W. U. M. S., 1918. Instr. in Biology, Sterling (Illinois) Township High School, 1909-11; Instr. in Science, Madison (Wisconsin) High School, 1911-14; Student Asst. in Anatomy, W. U. M. S., 1914-18. Asst. in Surg., W. U. M. S. Acting Res. Surg. to the B. H., 1919-20.

### STANTON, JAMES MARK

M.D., Univ. of Mich., 1918. Res. Phys. State Psycho. Hosp., Ann Arbor, Mich., 1918-19. Asst. Res. Neur., B. H., 1919-20.

### STRANQUIST, E. A.

B.S., Univ. of Utah, 1916; M.D., W. U. M. S., 1918. S. I., B. H., 1918-19.

### STRAUS, FRANCIS H.

M.D., H. M. S., 1919. S. I., B. H., 1919-20. Adm. Officer, Michael Reese Hosp., Chicago, 1920. Res. Surg., Presbyterian Hosp., Chicago, and Fellow in Surg., Rush Med. Coll., 1920.

### \*STRODE, JOSEPH EMMERSON

M.D., W. U. M. S., 1915. S. I., B. H., 1915-16.

BARNES HOSPITAL

**THOMSON, CARROLL I.**

M.D., Detroit Coll., 1916. Demonstrator of Ob., Univ. of Pittsburgh, 1917-18. Asst. Res. Ob., B. H., May, 1919, to July, 1919.

**\*TORMEY, ALBERT R.**

A.B., Univ. of Wis., 1914; M.D., W. U. M. S., 1917. M. I., B. H., 1917-18.

**\*VERA, MIGUEL**

Asst. Res. Med., 1916.

**\*WEIBRAUCH, H. V.**

Asst. Res. Surg., B. H., 1916.

**\*WENNERMAN, SAMUEL FRANKLIN**

M.D., W. U. M. S., 1915. S. I., B. H., 1916-17.

**\*WILKENING, WILLIAM THEODORE**

M.D., W. U. M. S., 1915. O. and G. I., B. H., 1915-17. Res. O. and G. B. H., 1917-18. Res. Surg., B. H., 1918-19.

---

\* Record possibly incomplete; no reply received.

## Committees

### COMMITTEE FOR THE BARNES HOSPITAL

LOUIS H. BURLINGHAM, *Chairman*

GEORGE DOCK  
EVARTS A. GRAHAM

EUGENE L. OPIE  
HENRY SCHWARZ

### COMMITTEE FOR THE WASHINGTON UNIVERSITY DISPENSARY

ERNEST SACHS, *Chairman*

LOUIS H. BURLINGHAM  
GEORGE DOCK  
ARTHUR E. EWING

HENRY SCHWARZ

EVARTS A. GRAHAM  
PHILIP C. JEANS  
EUGENE L. OPIE

### COMMITTEE FOR THE WASHINGTON UNIVERSITY TRAINING SCHOOL FOR NURSES

LOUIS H. BURLINGHAM, *Chairman*

W. MCKIM MARRIOTT

HENRY SCHWARZ

G. CANBY ROBINSON

### COMMITTEE FOR THE DEPARTMENT OF SOCIAL SERVICE

G. CANBY ROBINSON, *Chairman*

LOUIS H. BURLINGHAM

BORDEN S. VEEDER





## FORM OF BEQUEST

*I give and bequeath unto the Trustees of Barnes Hospital (now located at Kingshighway and Euclid Avenue, St. Louis, Missouri), and to their successors in trust, the sum of*

*----- Dollars  
as a permanent endowment fund,\* the income  
of which shall be used by said Trustees for the  
support and maintenance of said Hospital.*

*(See note below.)*

---

NOTE.—If real estate is given, use the words, "I give, devise and bequeath," etc. If it is desired to make a gift for a special purpose, describe the purpose fully in place of the words, "as a permanent endowment, etc."

\* See pp. 18, 19 and 20.